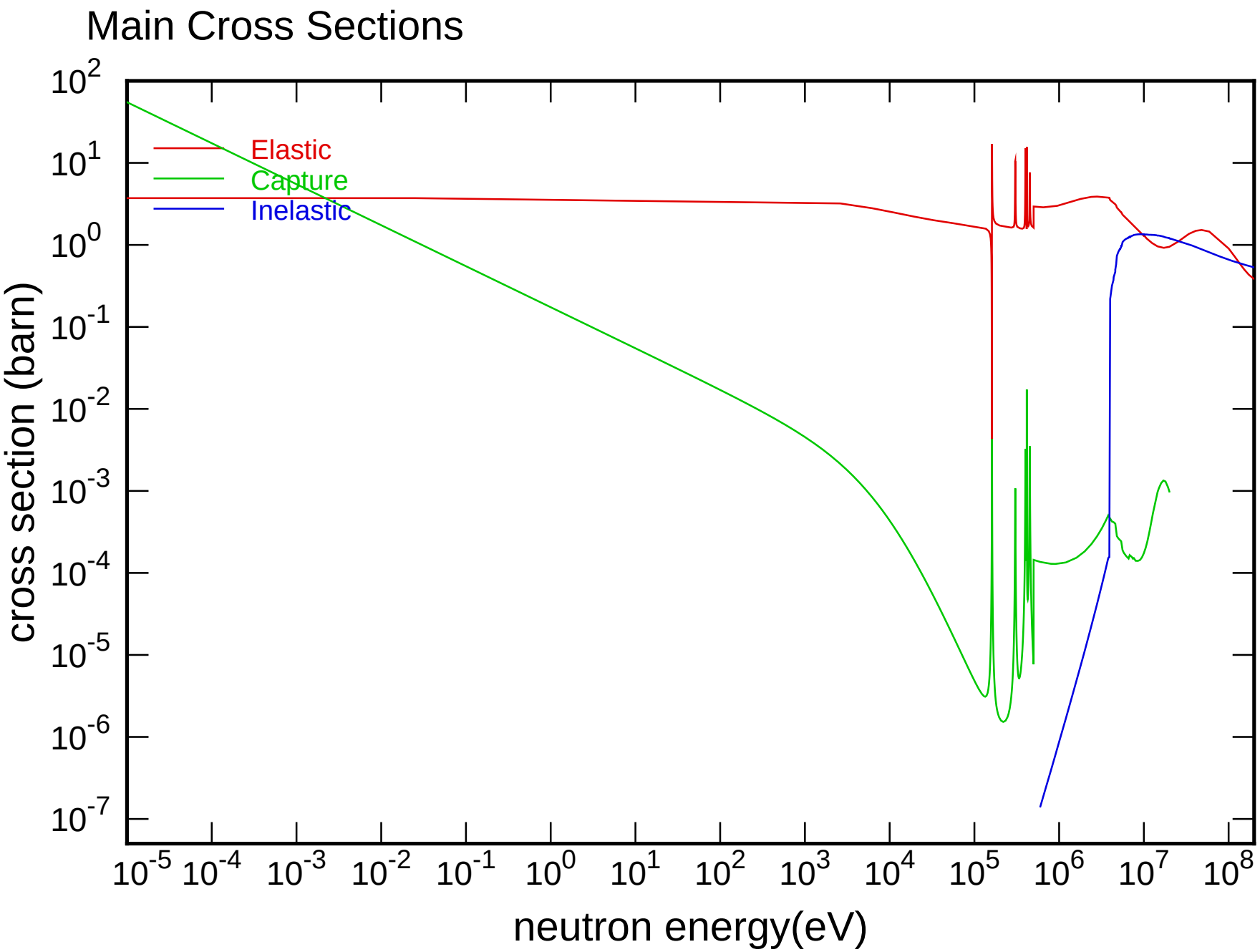
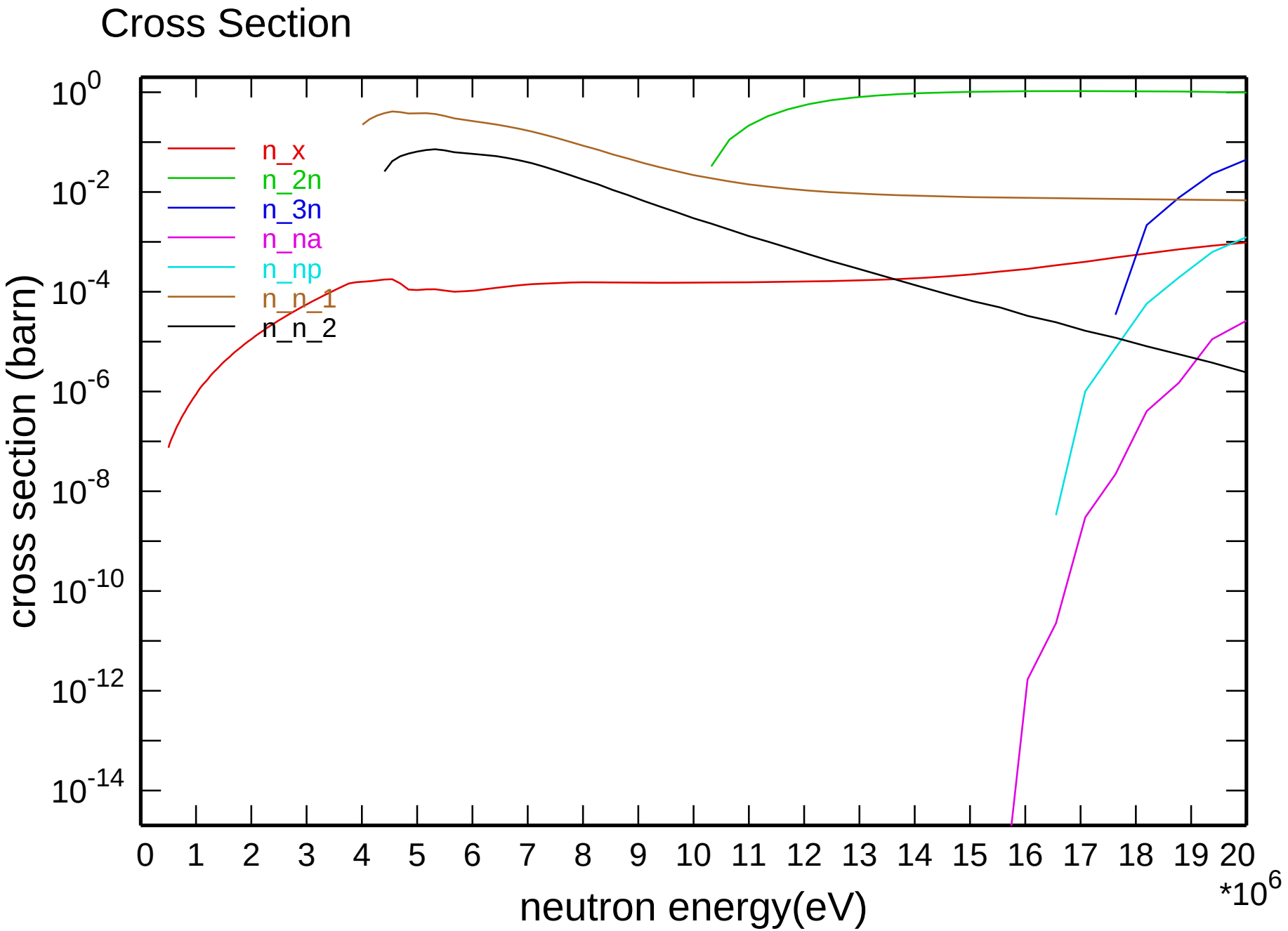
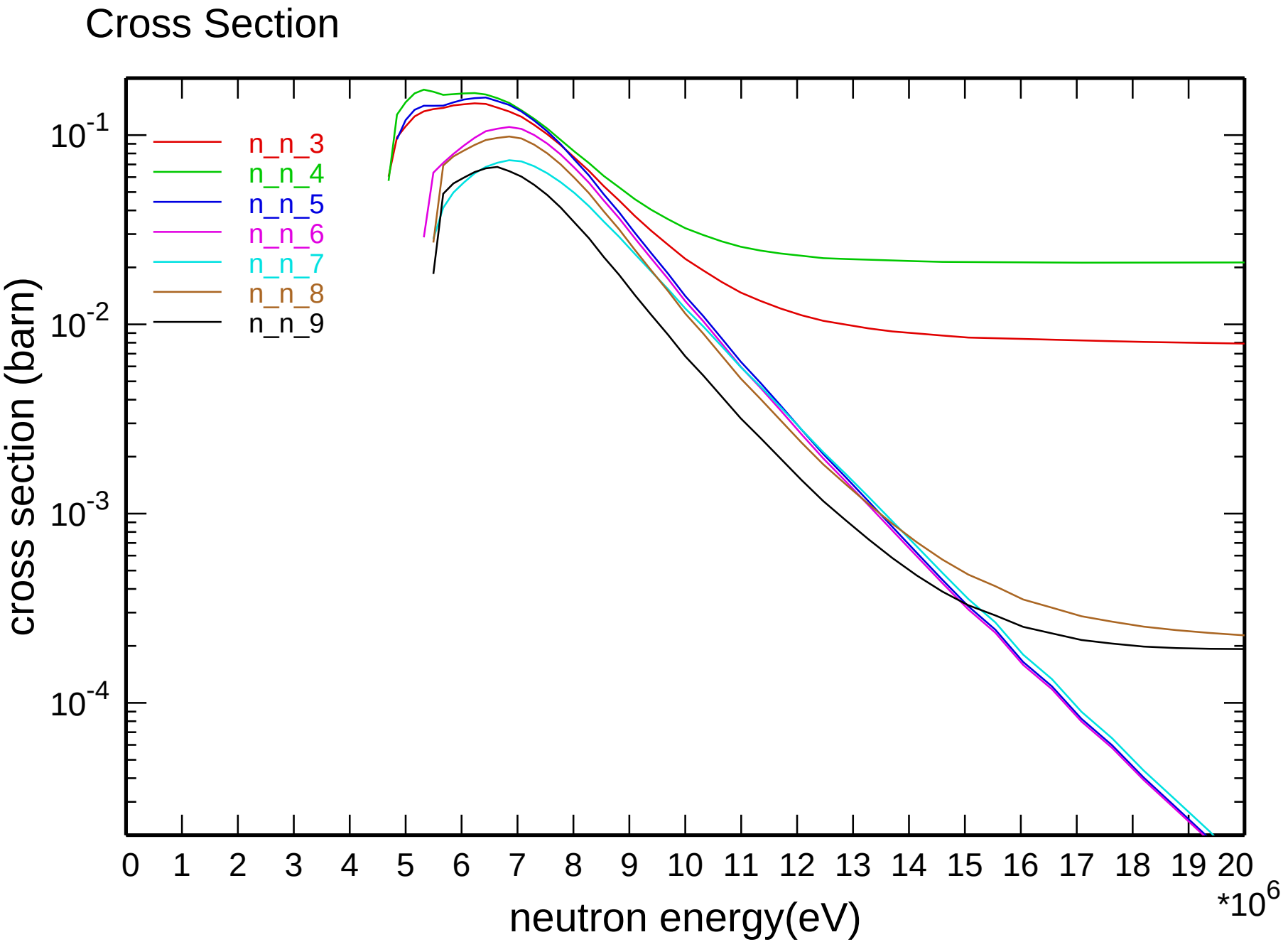
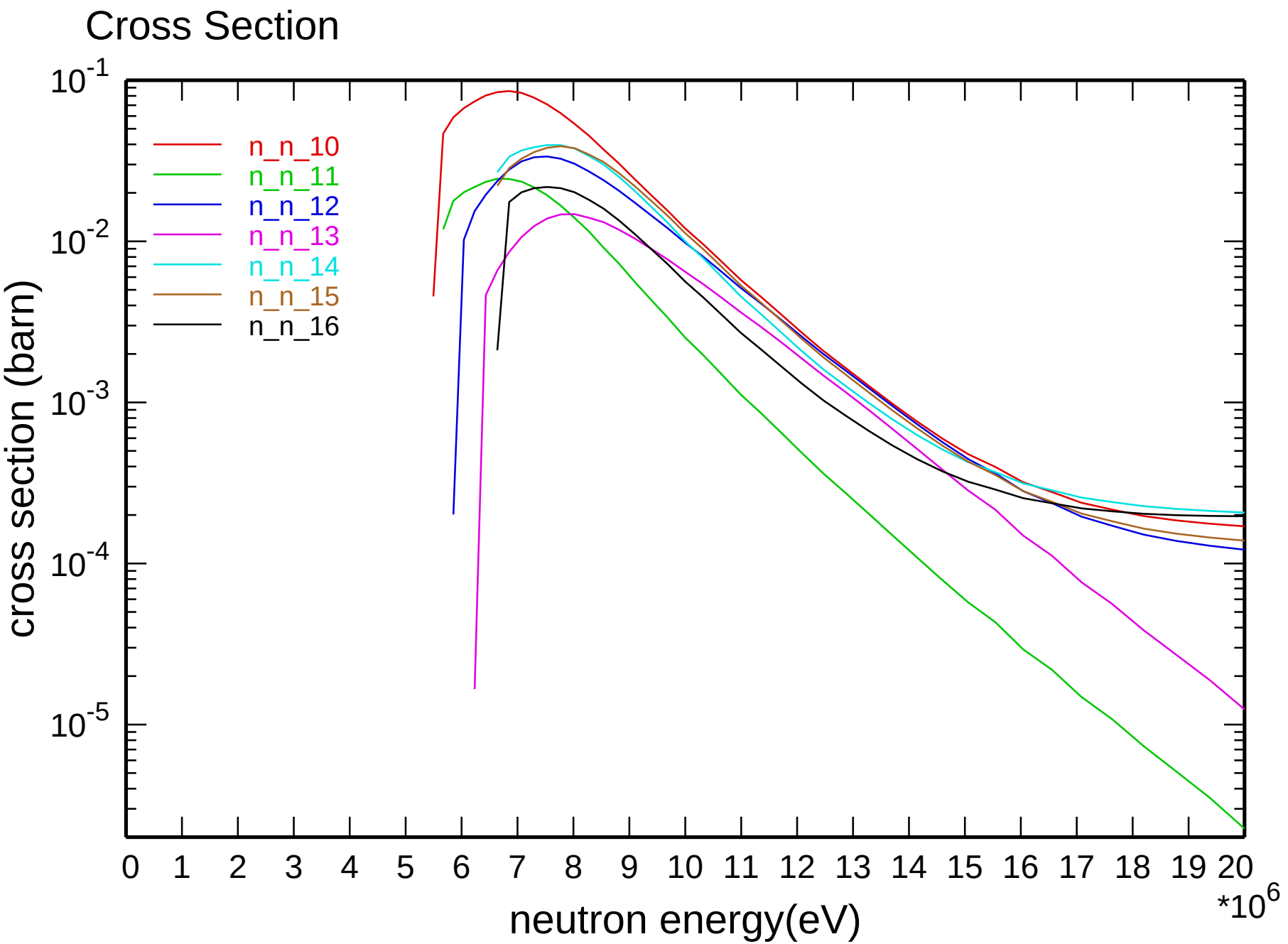
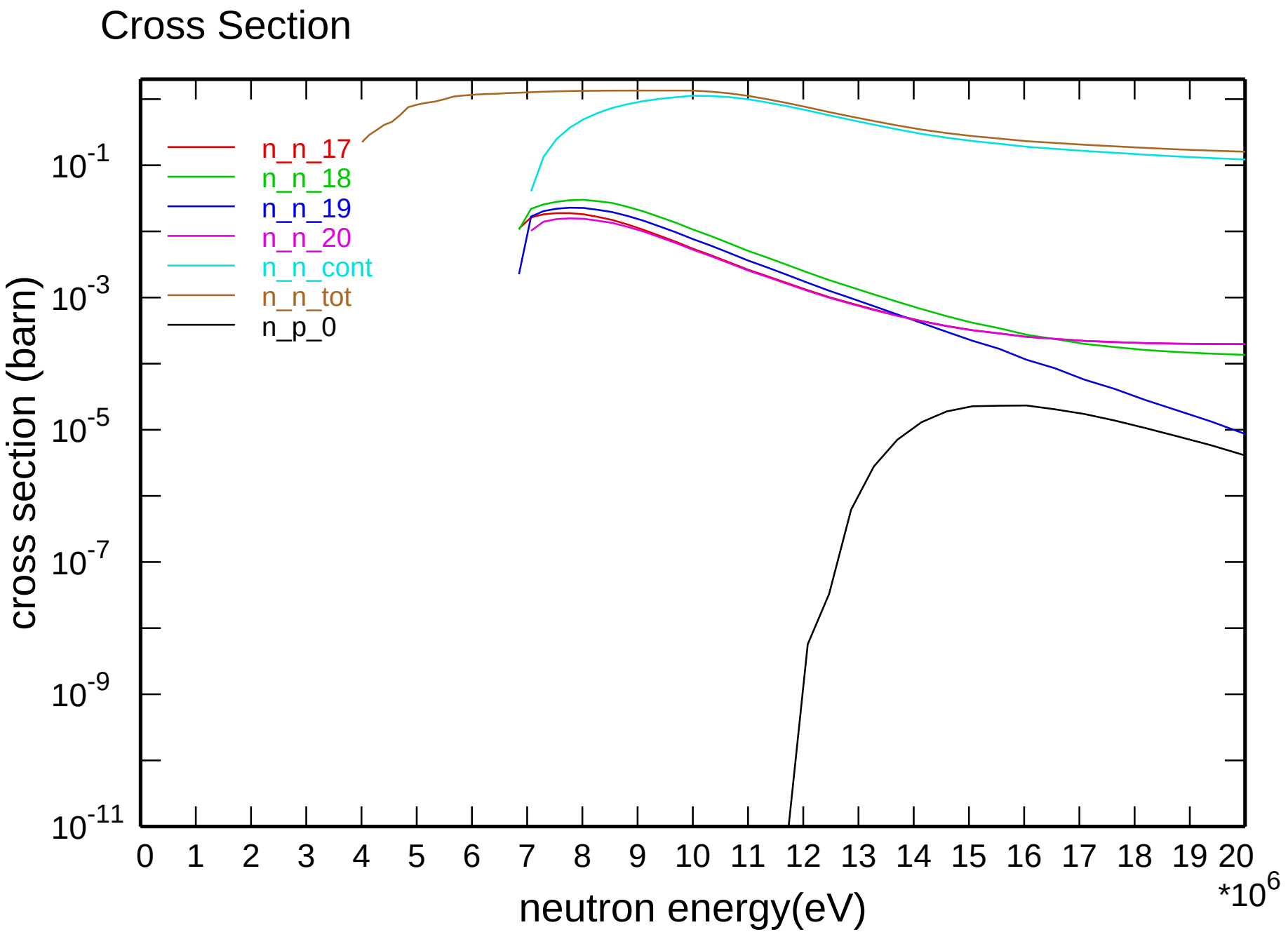
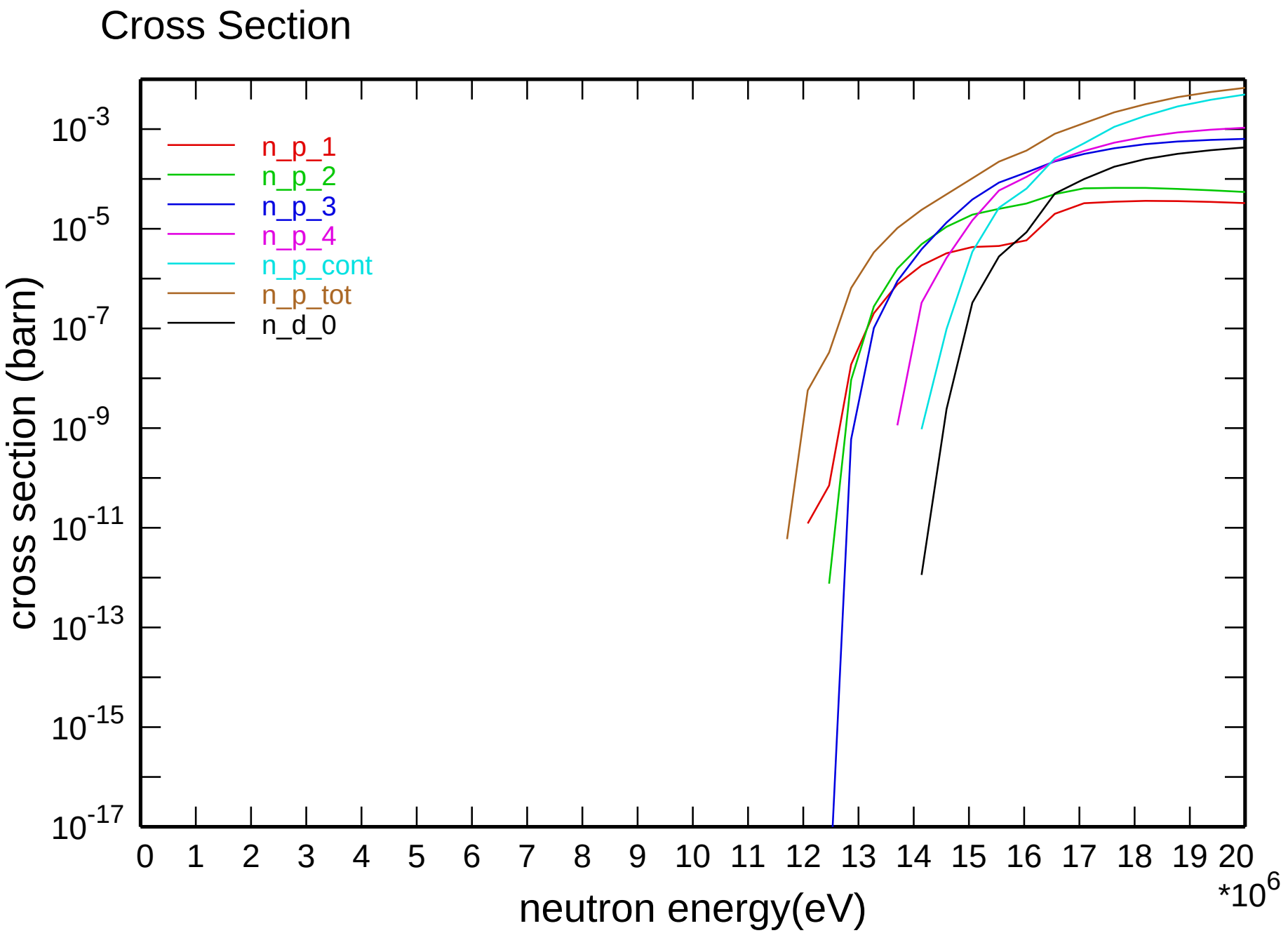

Main Cross Sections
Elastic
Capture
Inelastic
cross section (barn)
neutron energy(eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

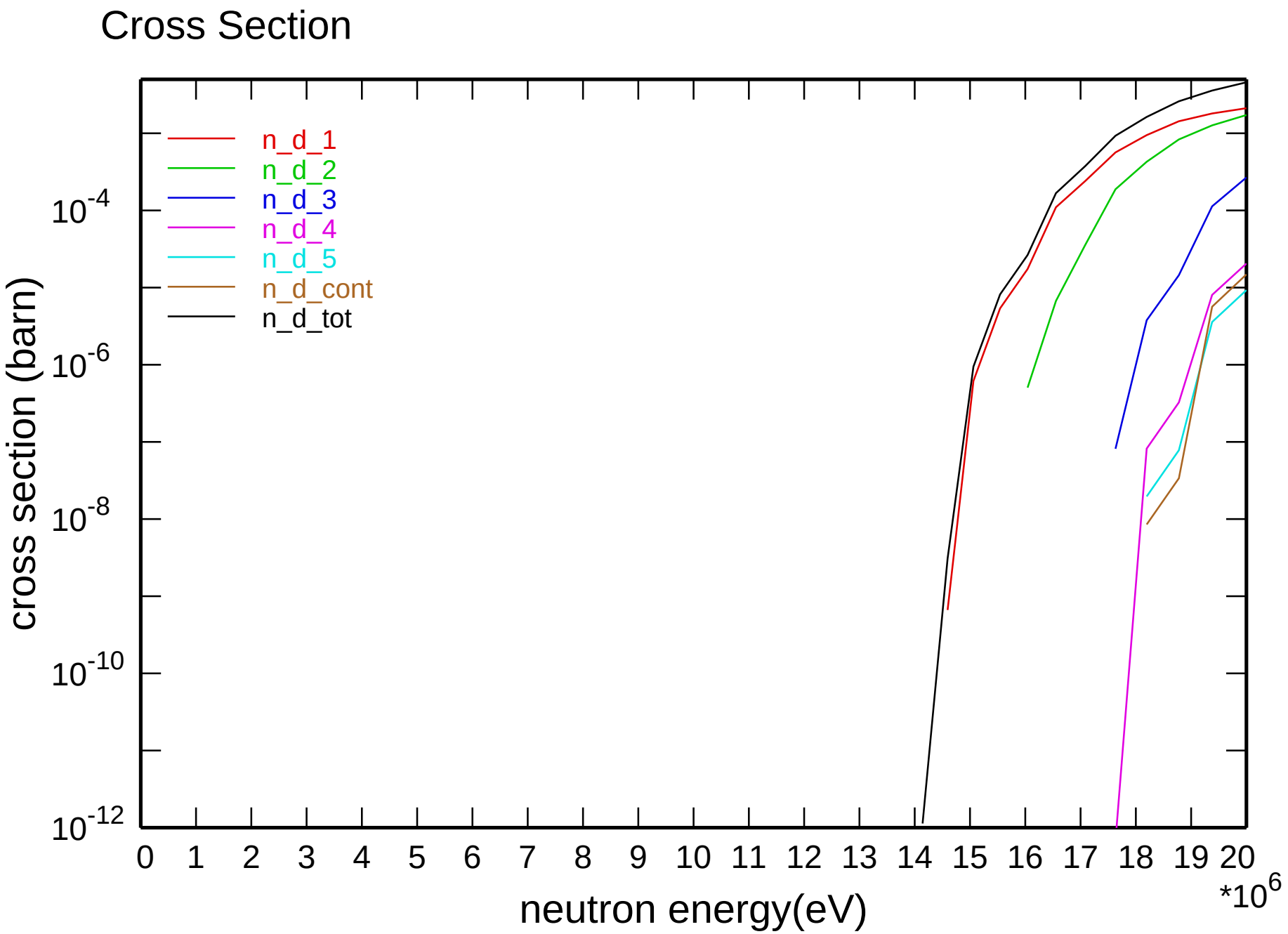

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_x
n_2n
n_3n
n_na
n_np
n_n_1
n_n_2
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
10^-12
10^-14
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

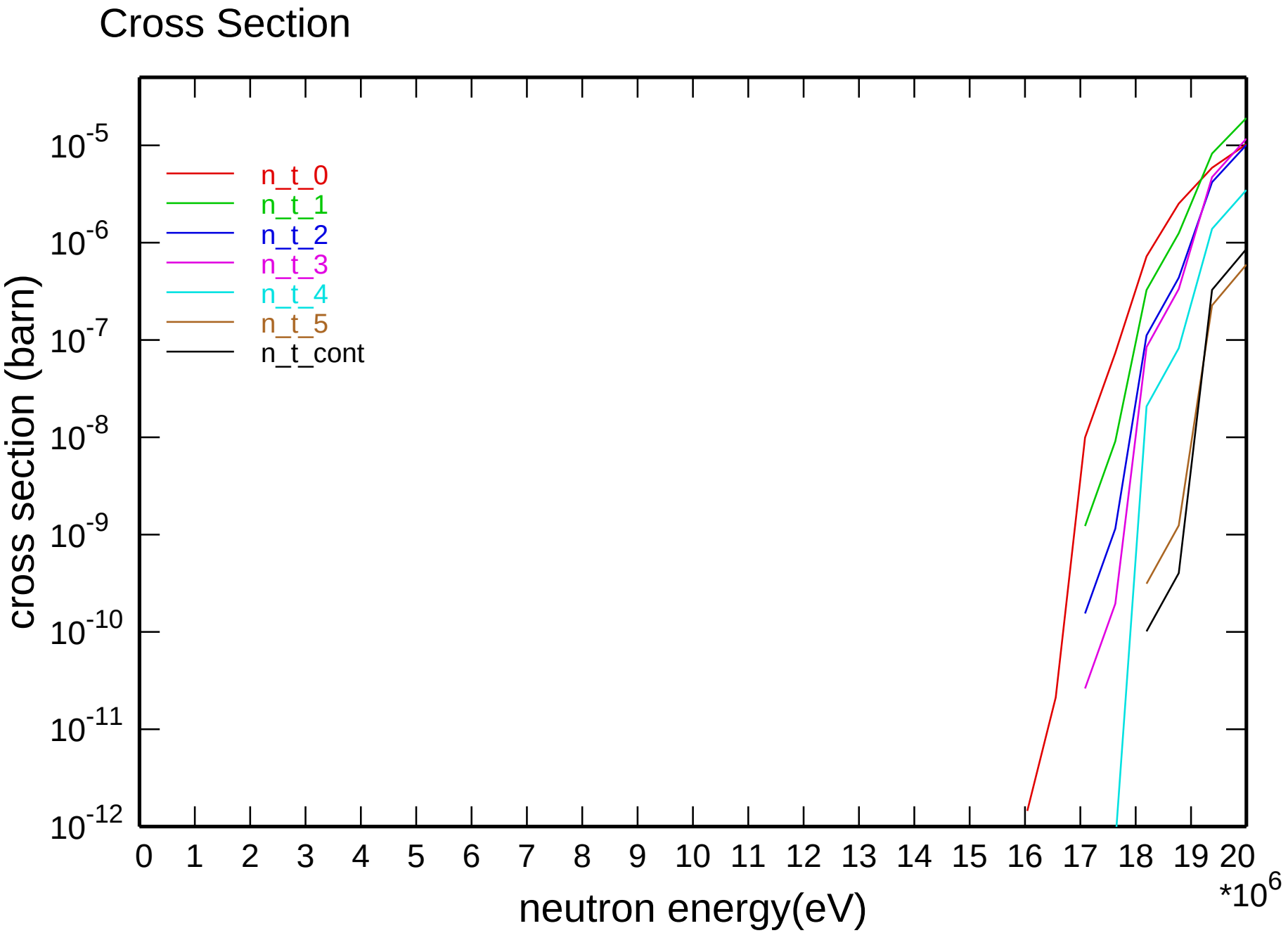

Cross Section
cross section (barn)
10-1
10-2
10-3
10-4
n_n_3
n_n_4
n_n_5
n_n_6
n_n_7
n_n_8
n_n_9
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

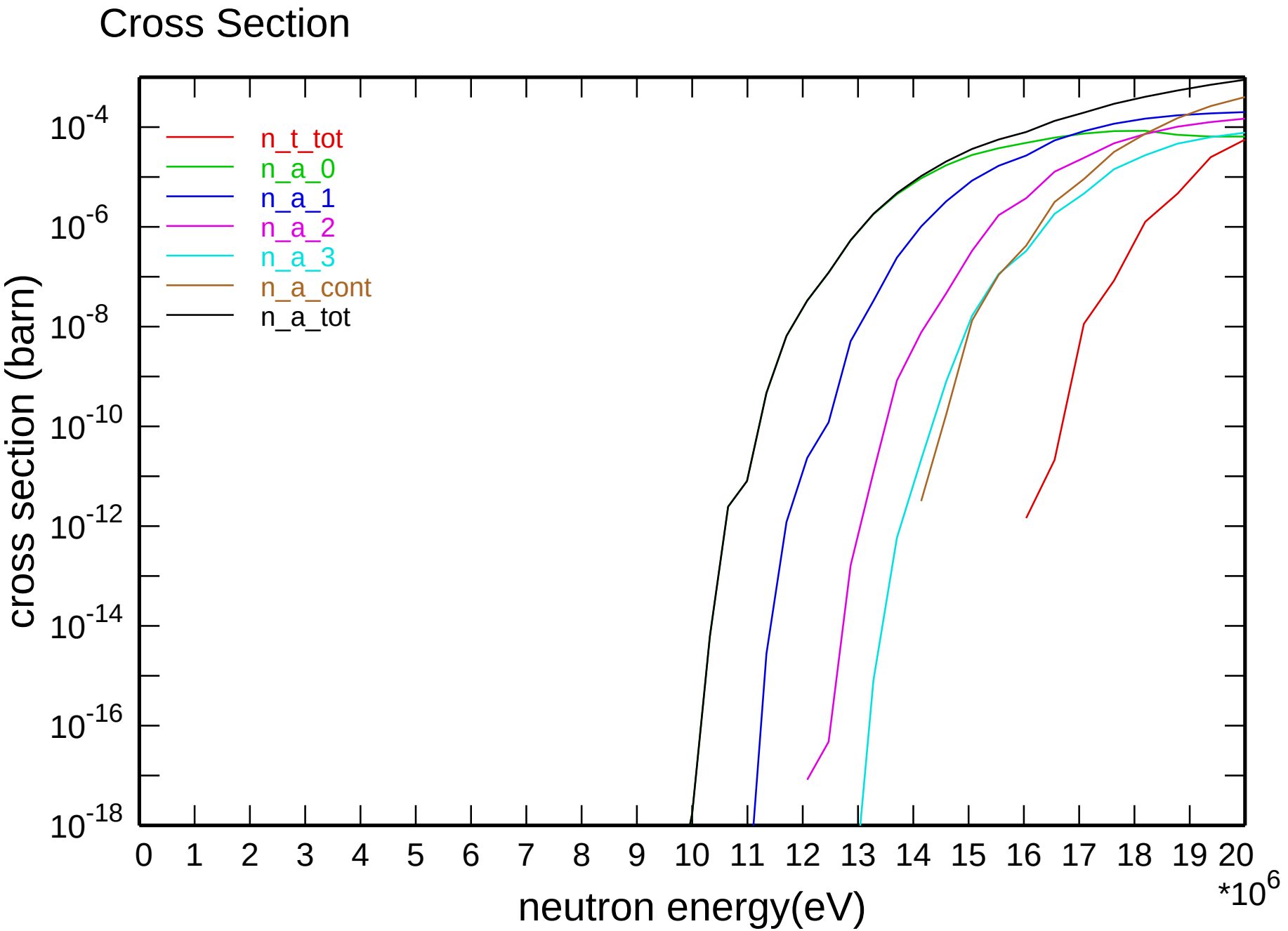

Cross Section
cross section (barn)
neutron energy(eV)
*10^6
n_n_10
n_n_11
n_n_12
n_n_13
n_n_14
n_n_15
n_n_16

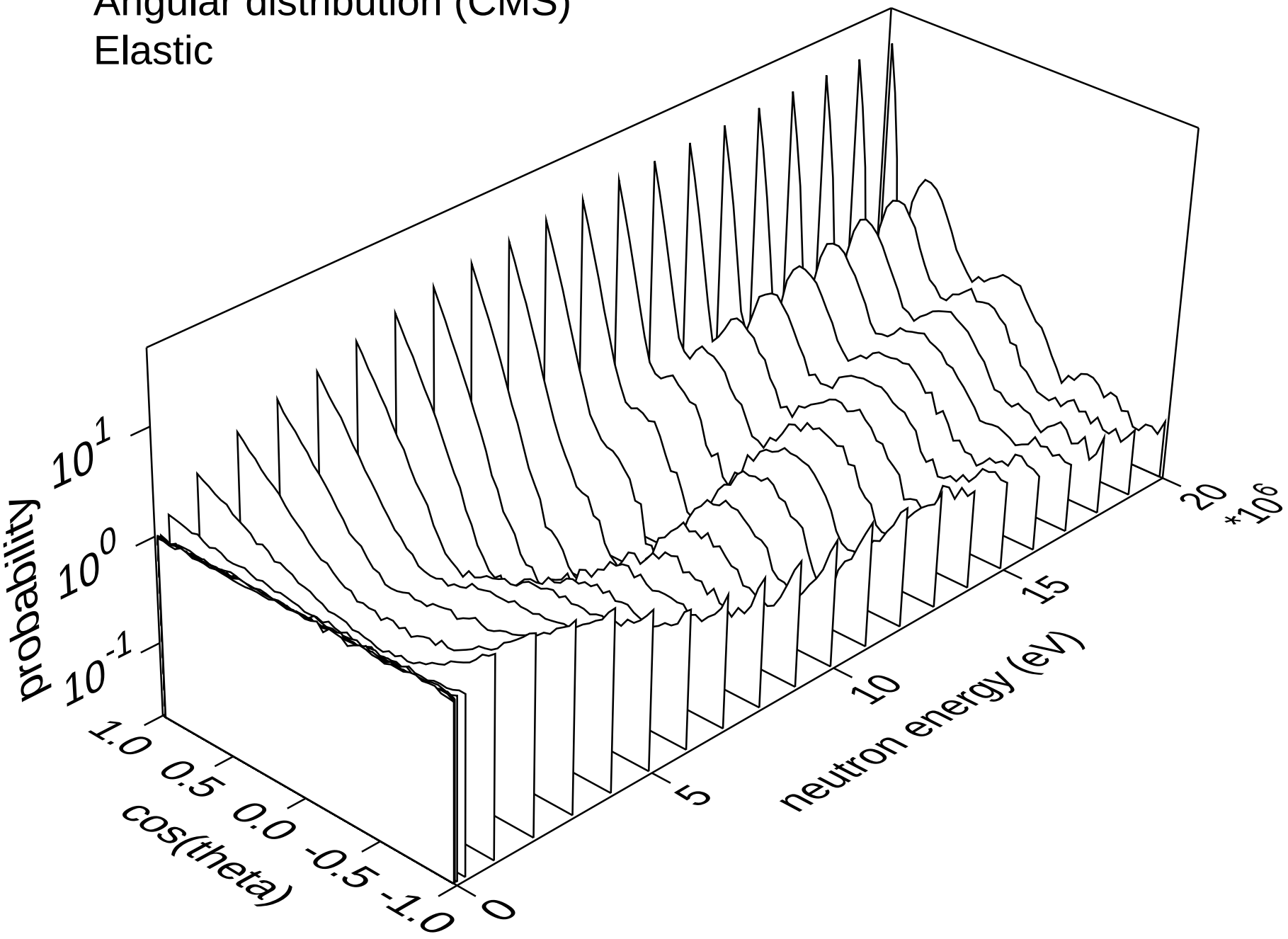

Cross Section
n_n_17
n_n_18
n_n_19
n_n_20
n_n_cont
n_n_tot
n_p_0
cross section (barn)
10-1
10-3
10-5
10-7
10-9
10-11
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

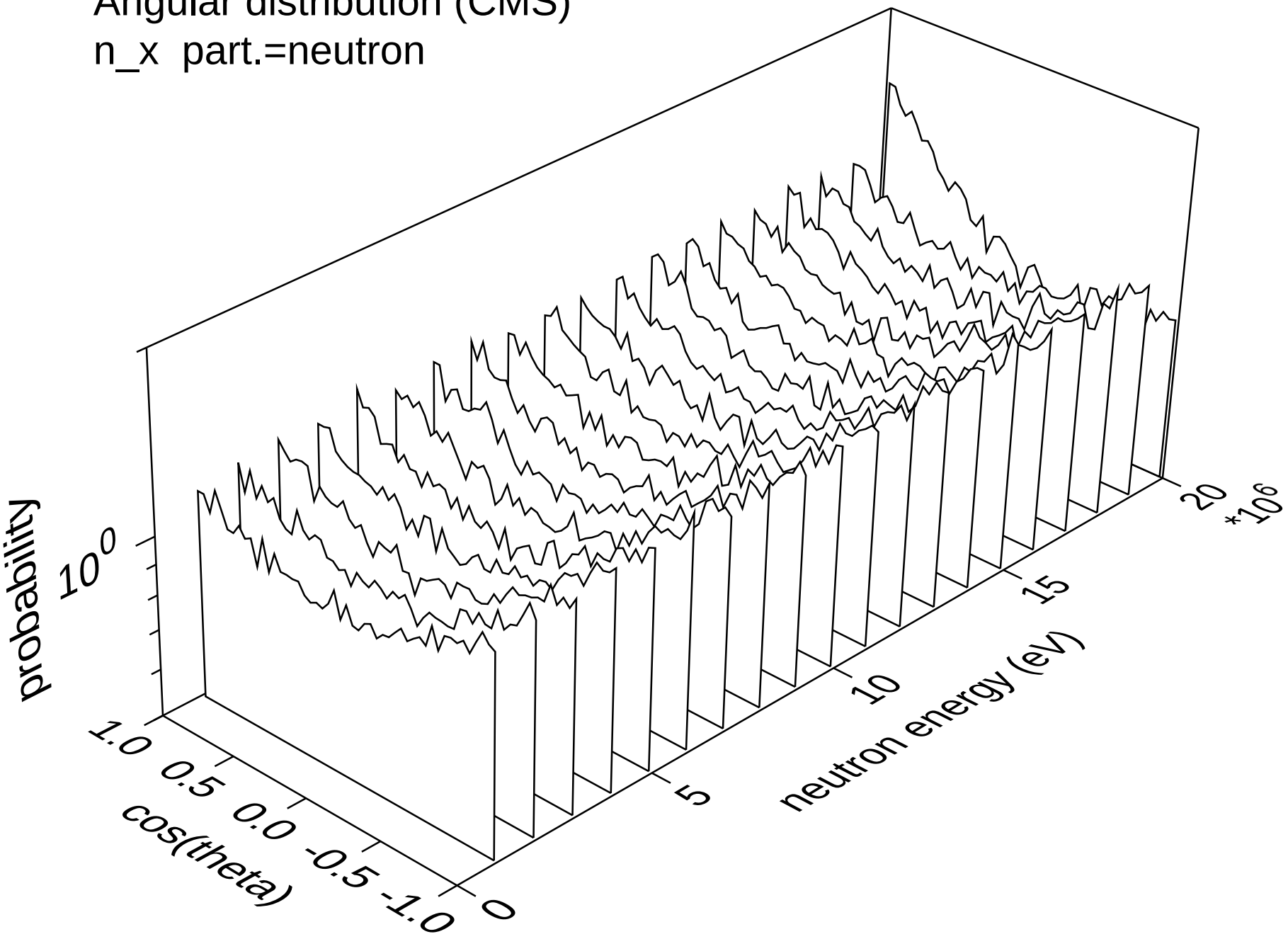

Cross Section
cross section (barn)
10-3
10-5
10-7
10-9
10-11
10-13
10-15
10-17
n_p_1
n_p_2
n_p_3
n_p_4
n_p_cont
n_p_tot
n_d_0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

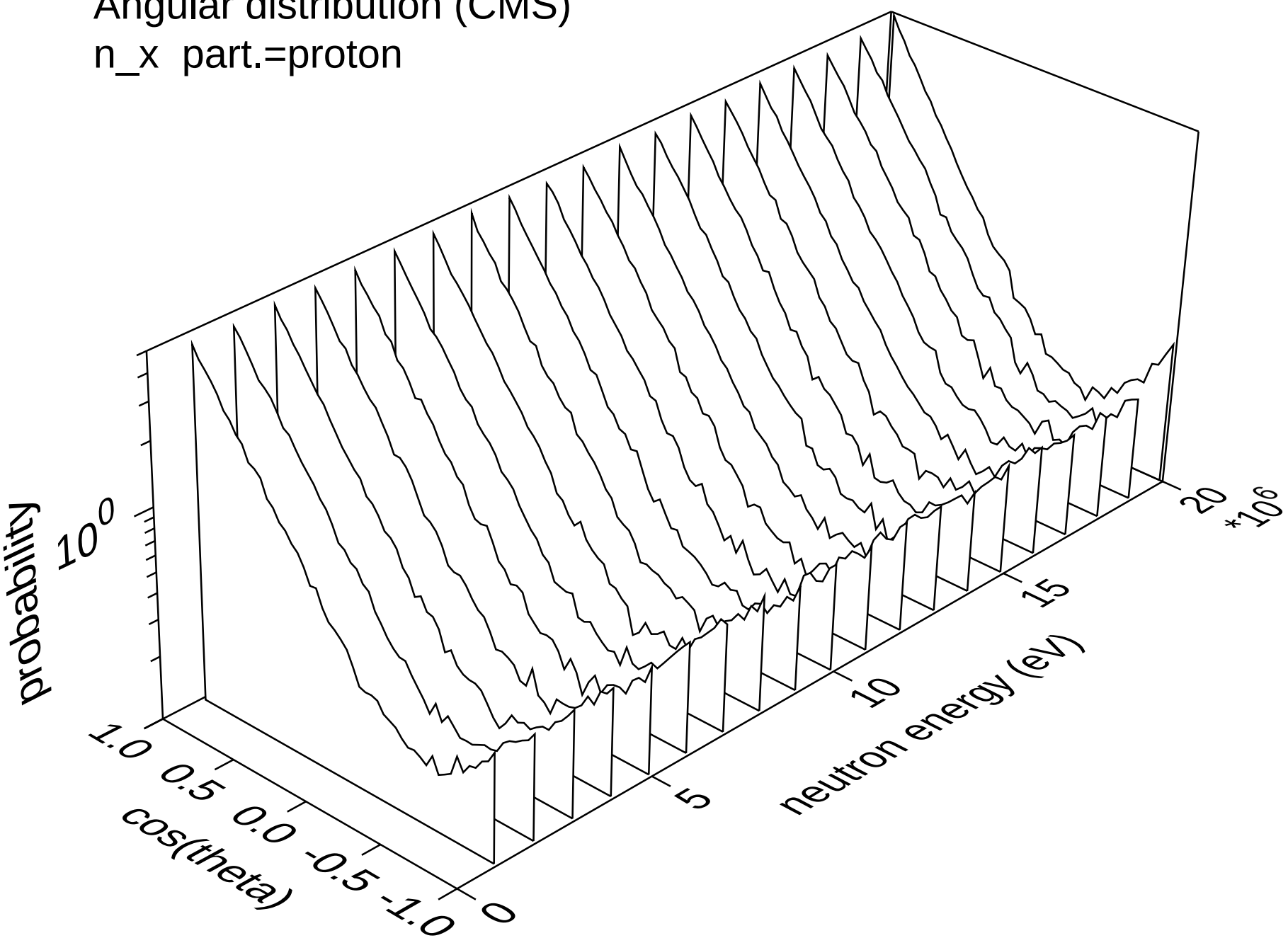

Cross Section
n_d_1
n_d_2
n_d_3
n_d_4
n_d_5
n_d_cont
n_d_tot
cross section (barn)
10-4
10-6
10-8
10-10
10-12
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

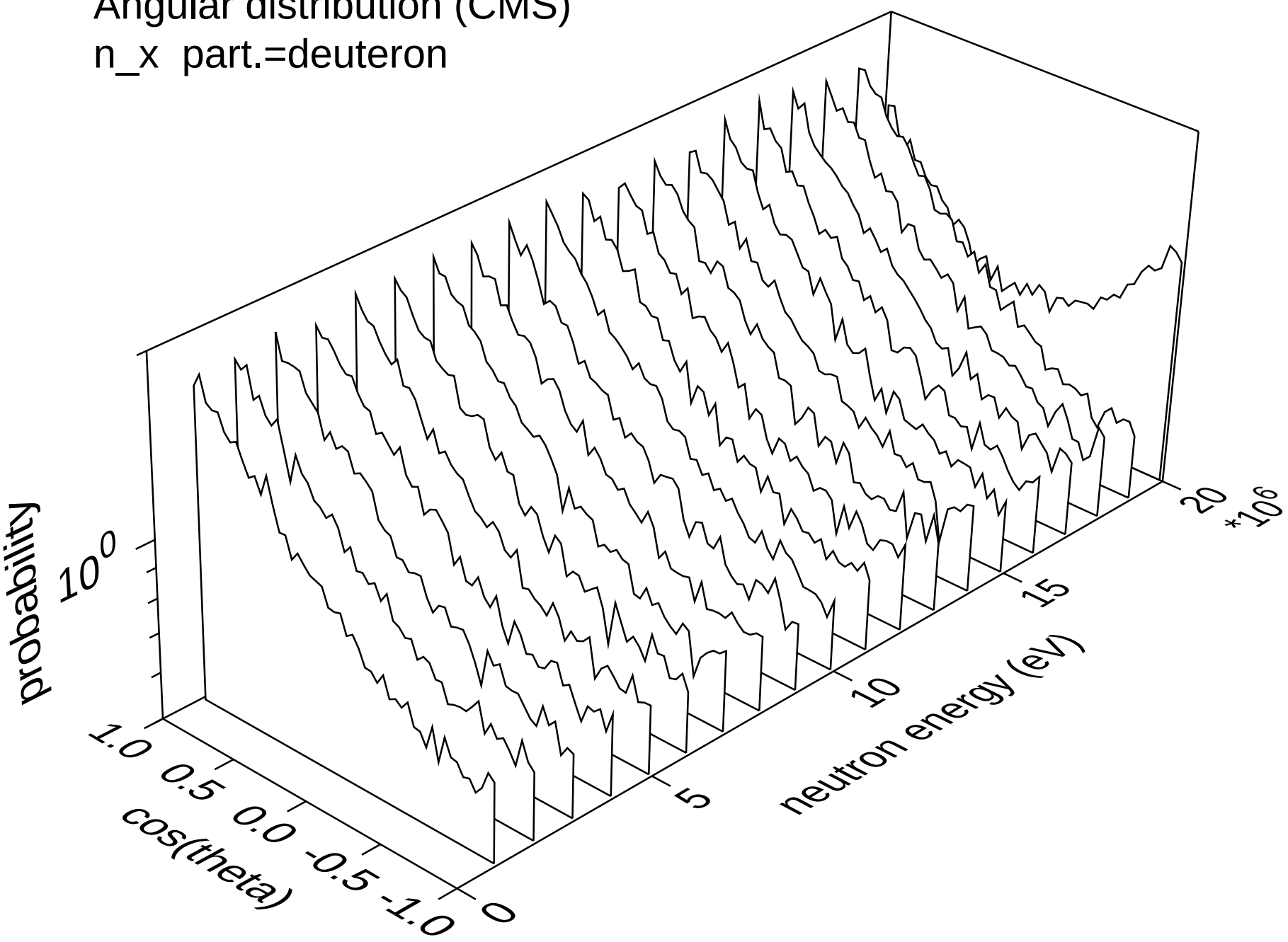

Cross Section
cross section (barn)
10-5
10-6
10-7
10-8
10-9
10-10
10-11
10-12
n_t_0
n_t_1
n_t_2
n_t_3
n_t_4
n_t_5
n_t_cont
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

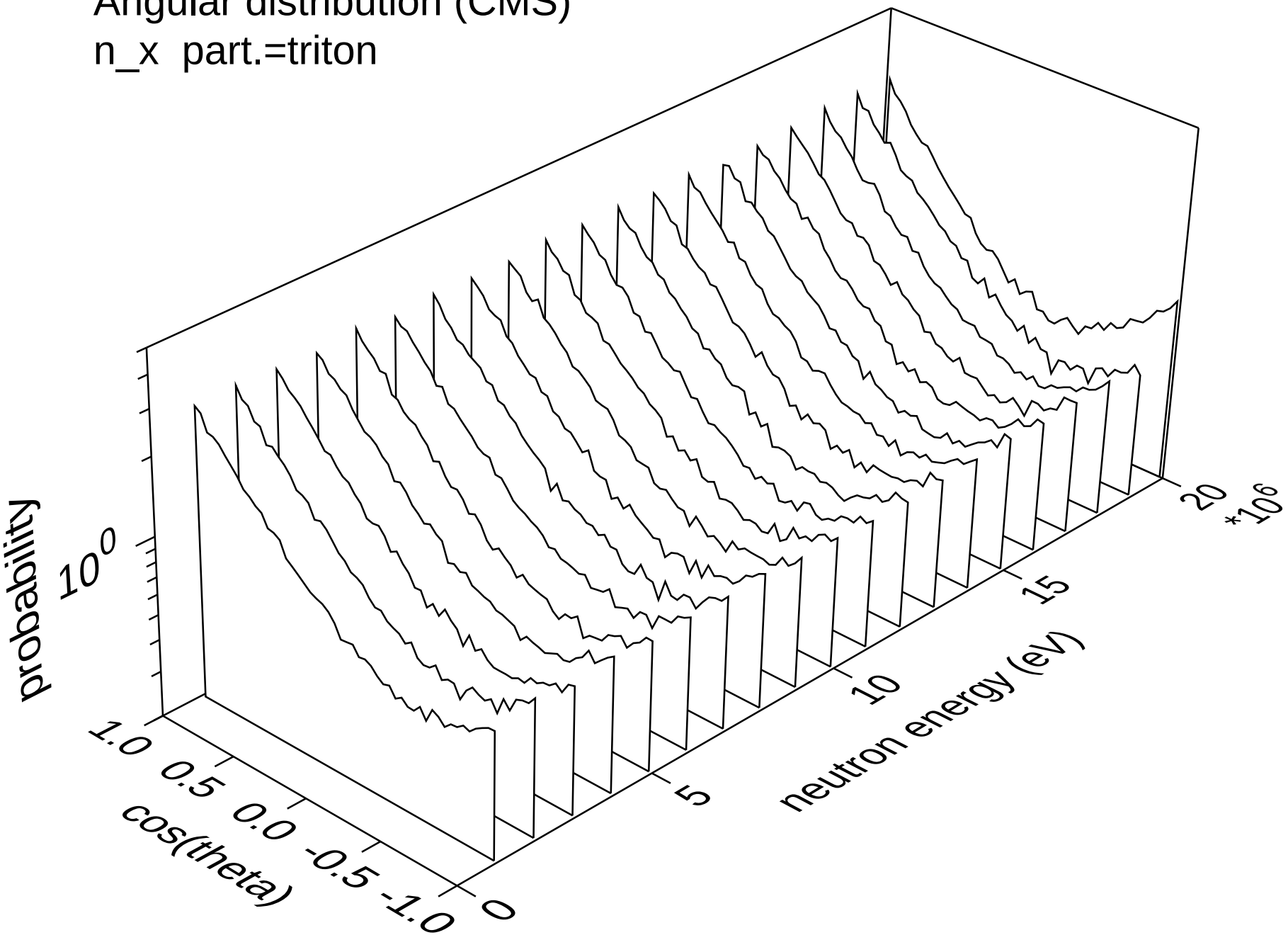

Cross Section
cross section (barn)
10-4
10-6
10-8
10-10
10-12
10-14
10-16
10-18
n_t_tot
n_a_0
n_a_1
n_a_2
n_a_3
n_a_cont
n_a_tot
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
*10^6
neutron energy(eV)

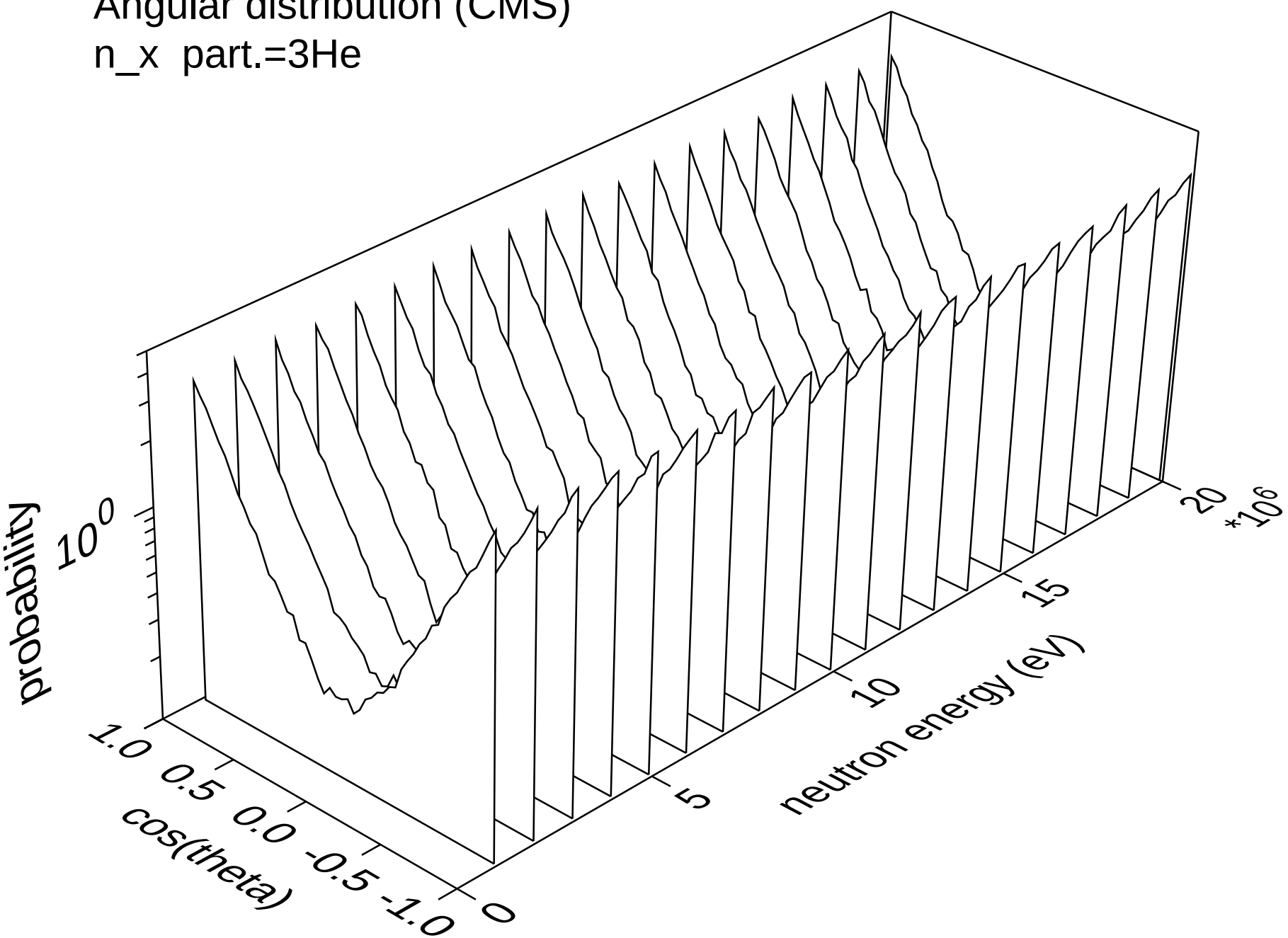

Angular distribution (CMS)
Elastic
probability
10^{1}
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

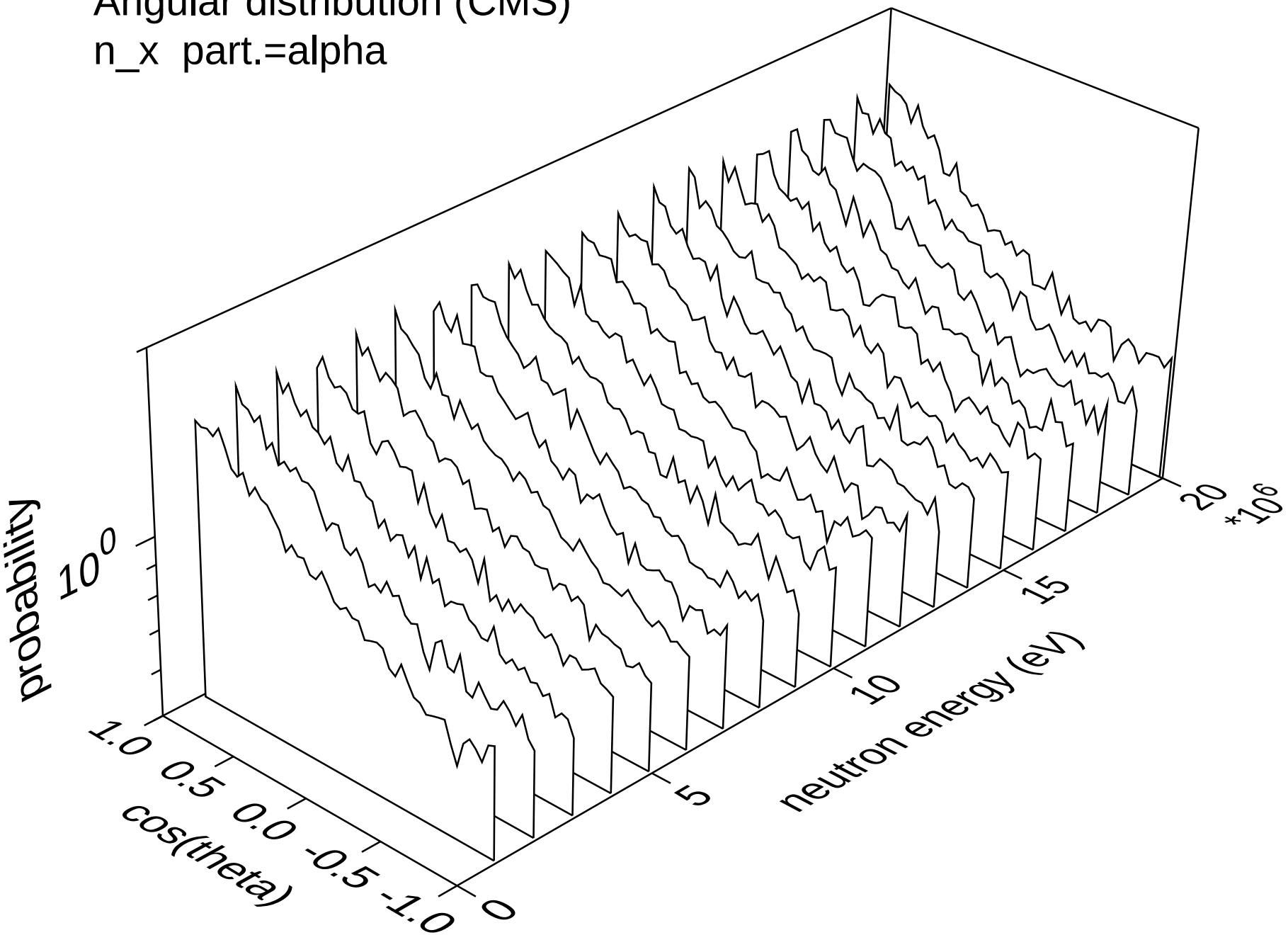

Angular distribution (CMS)
n_x part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

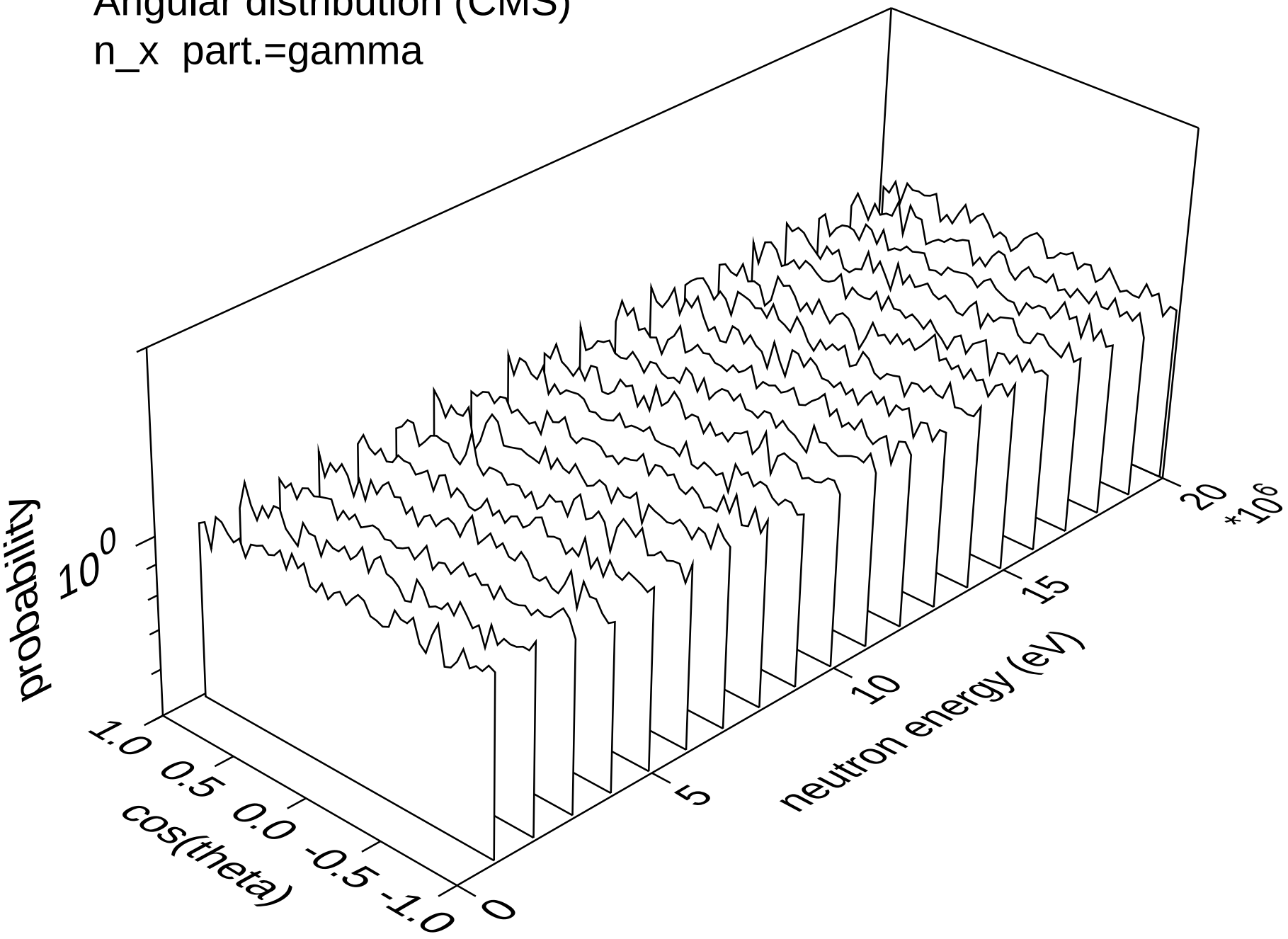

Angular distribution (CMS)
n_x part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

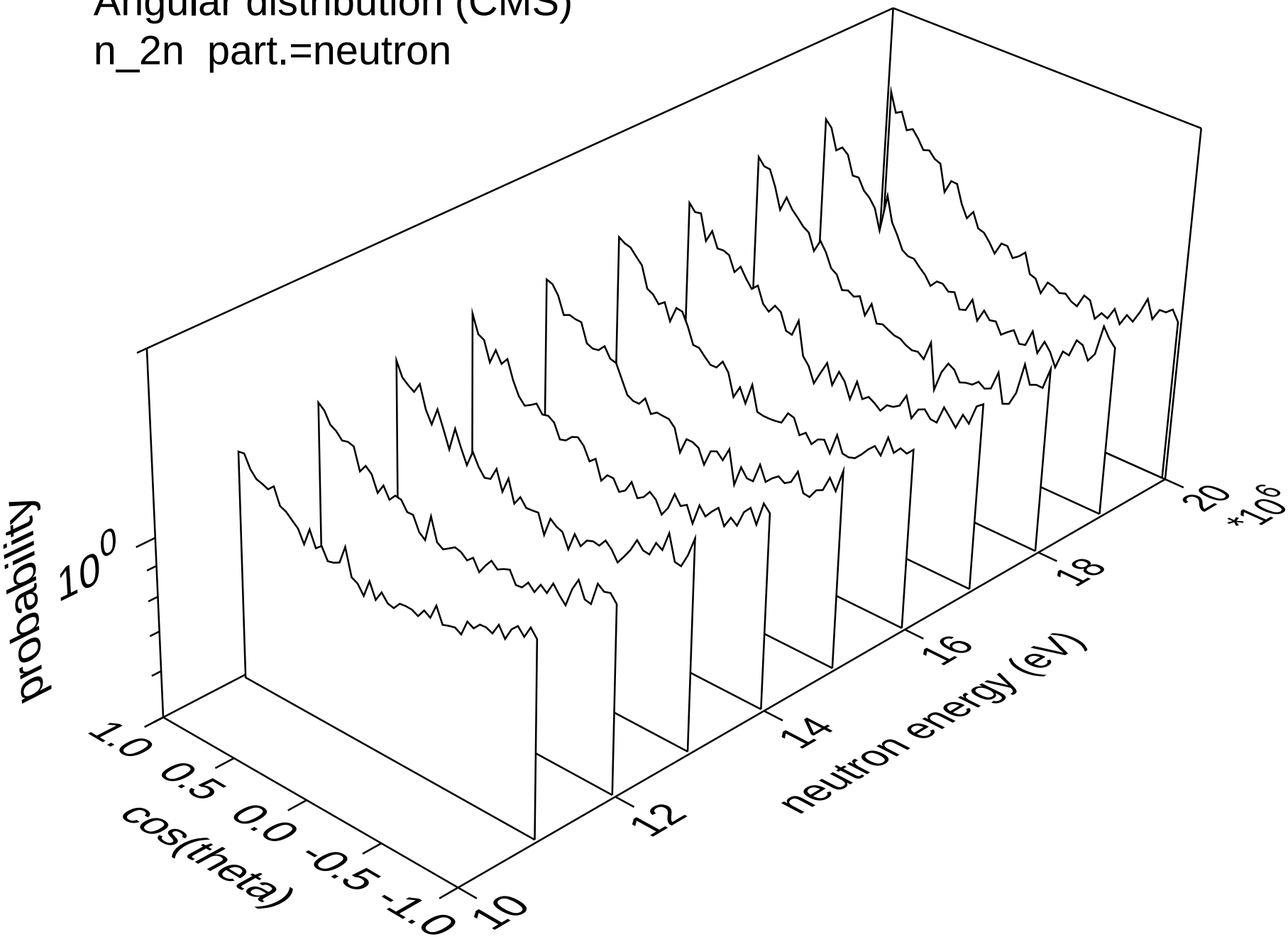

Angular distribution (CMS)
n_x part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

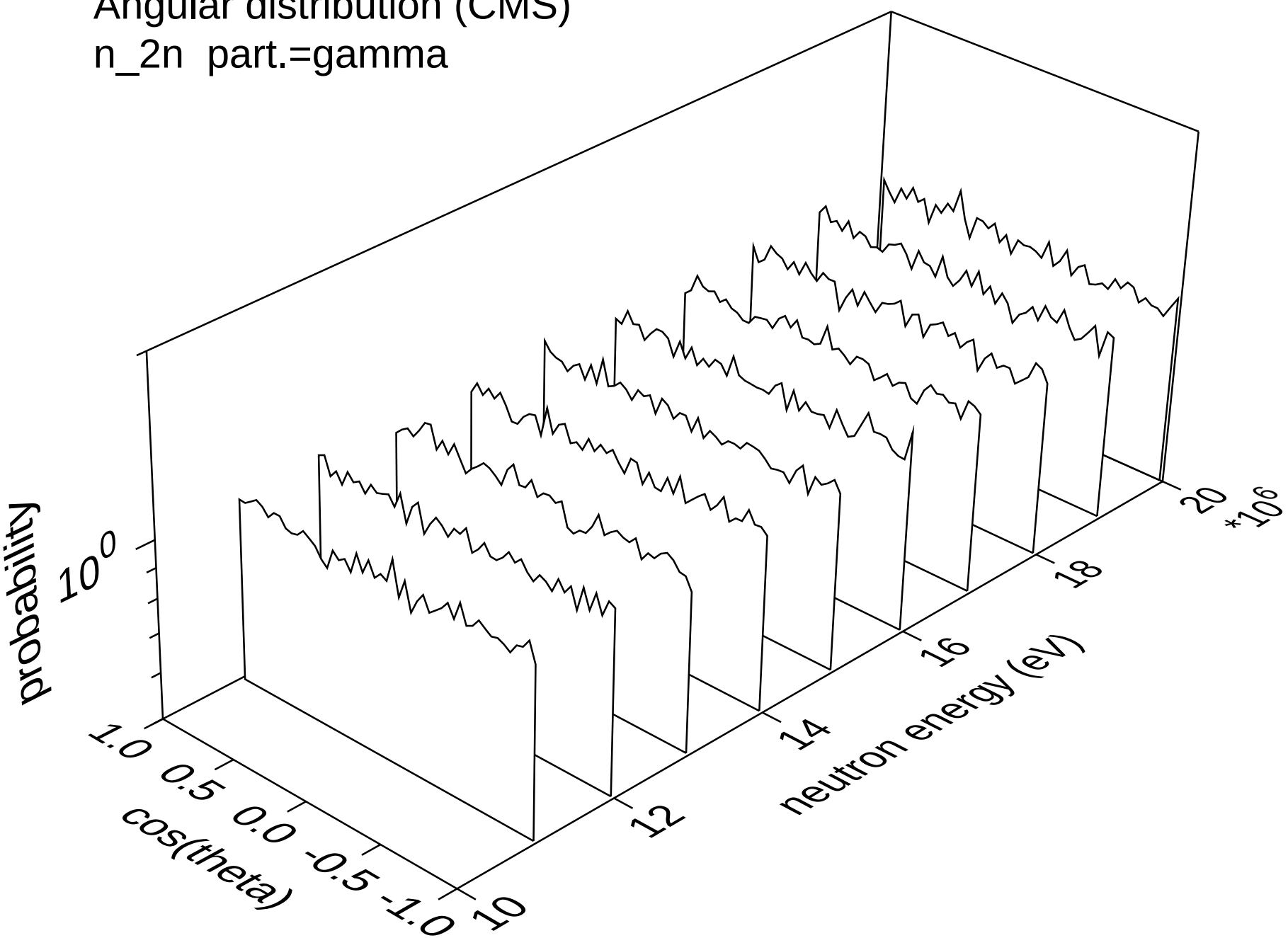

Angular distribution (CMS)
n_x part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

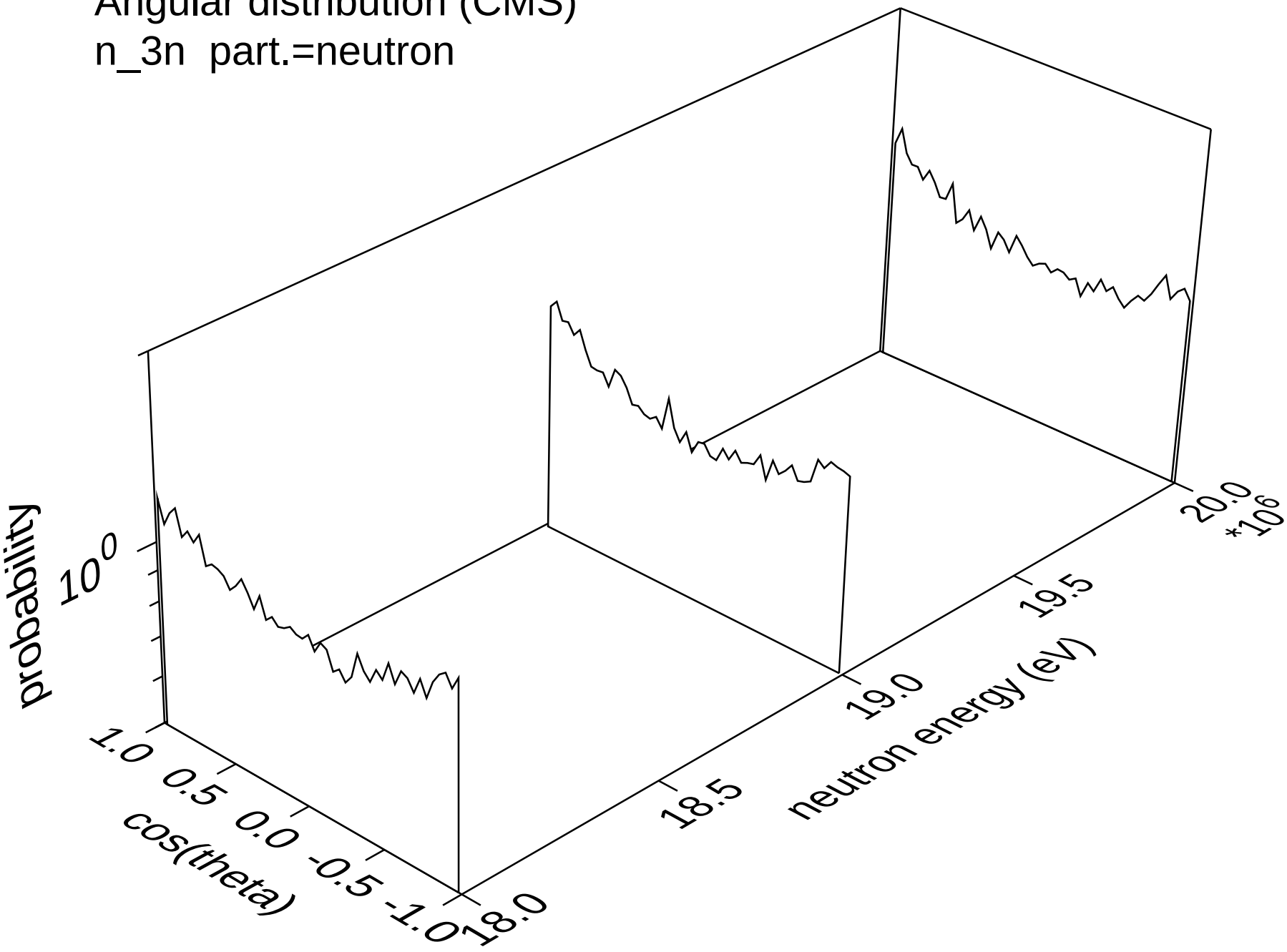

Angular distribution (CMS)
n_x part.=3He
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

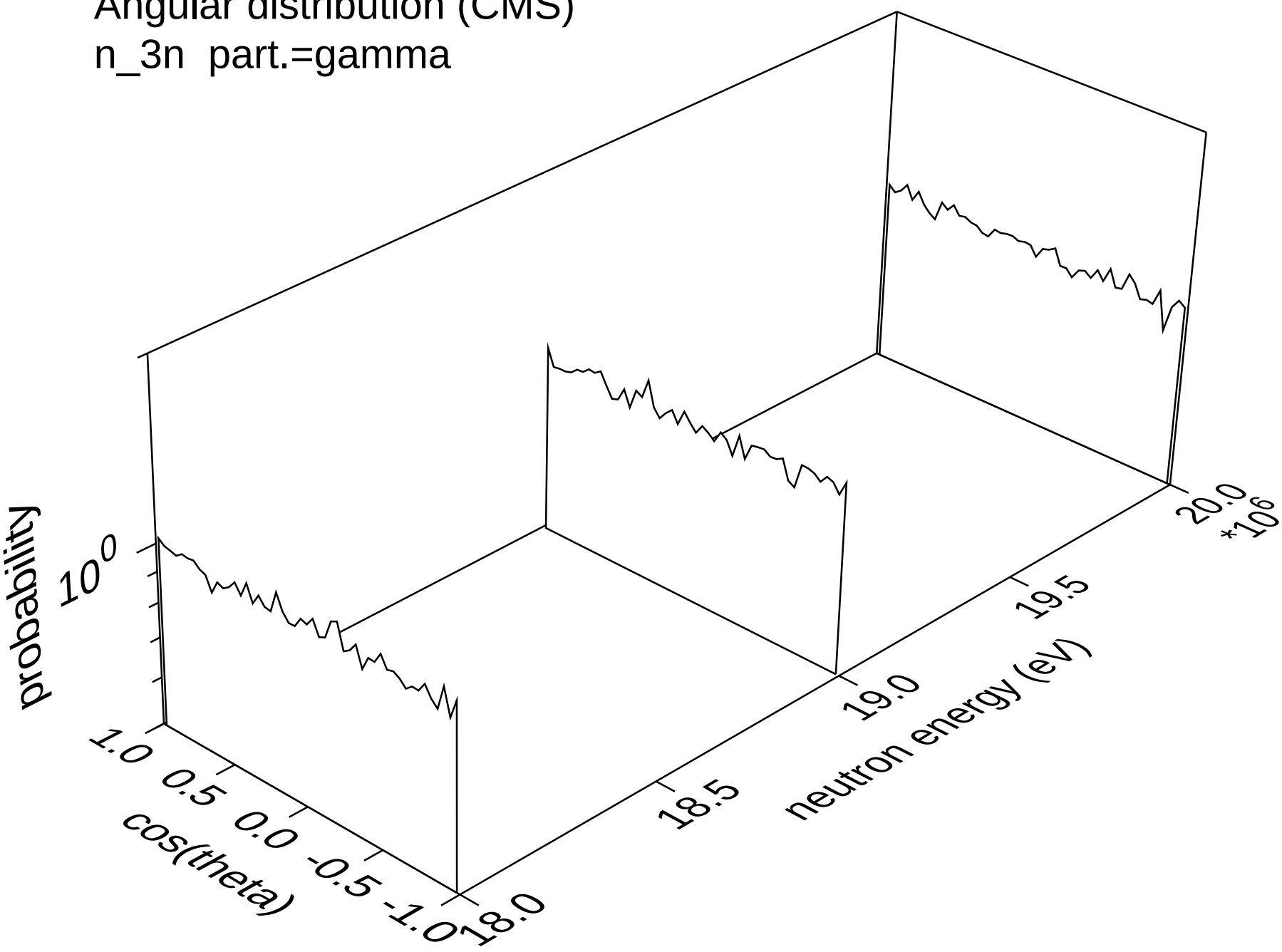

Angular distribution (CMS)
n_x part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

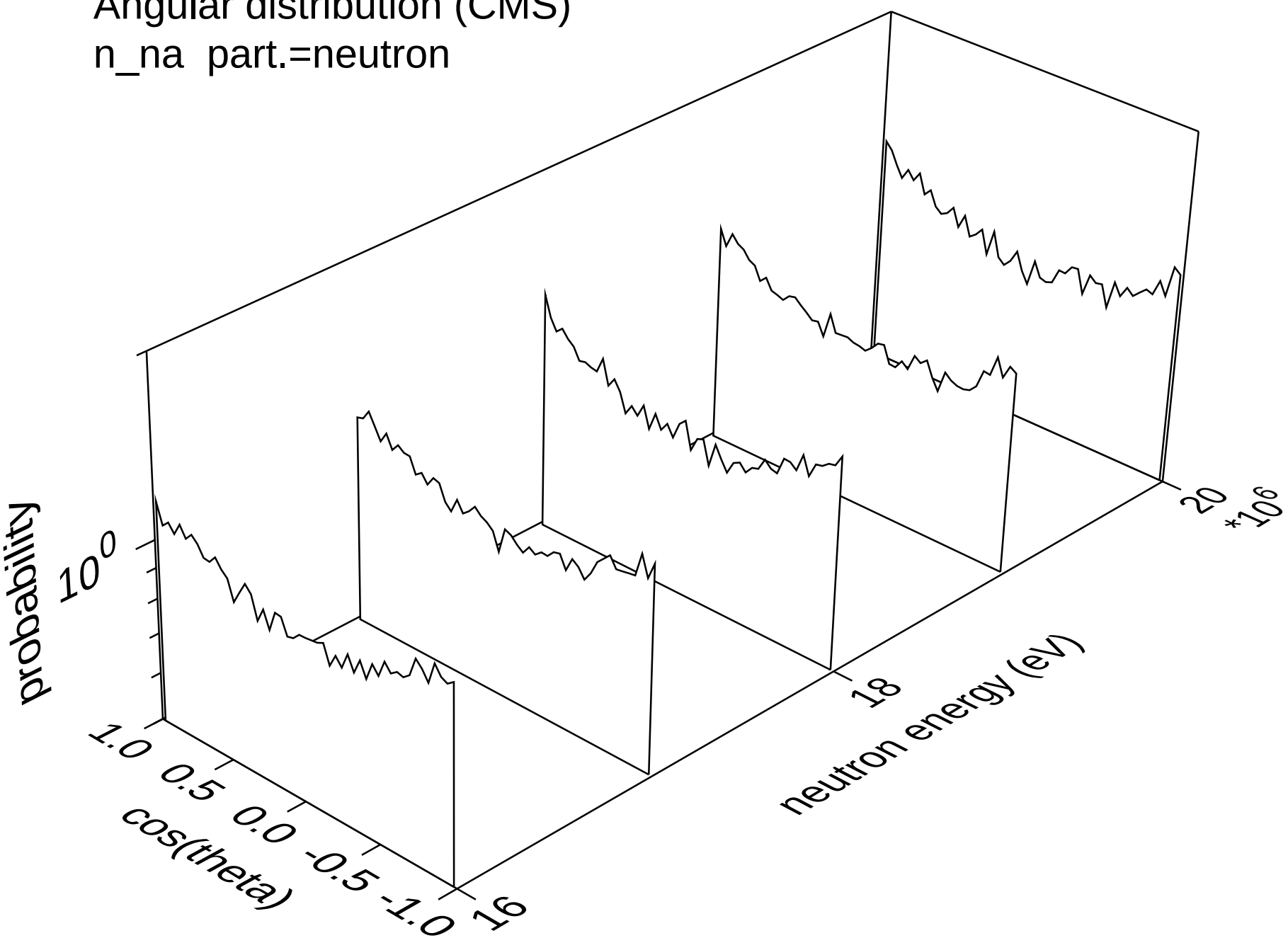

Angular distribution (CMS)
n_x part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

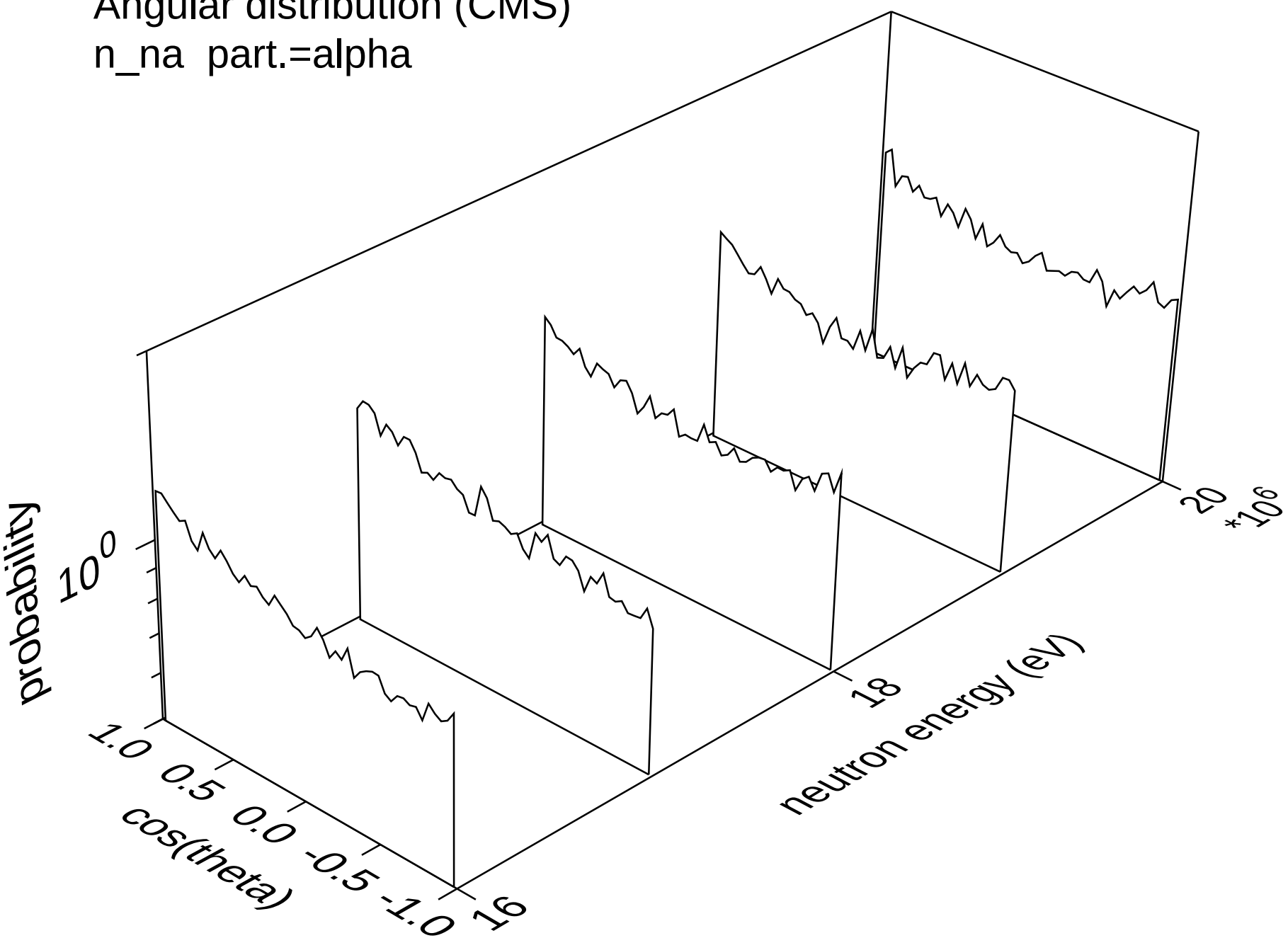

Angular distribution (CMS)
n_2n part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

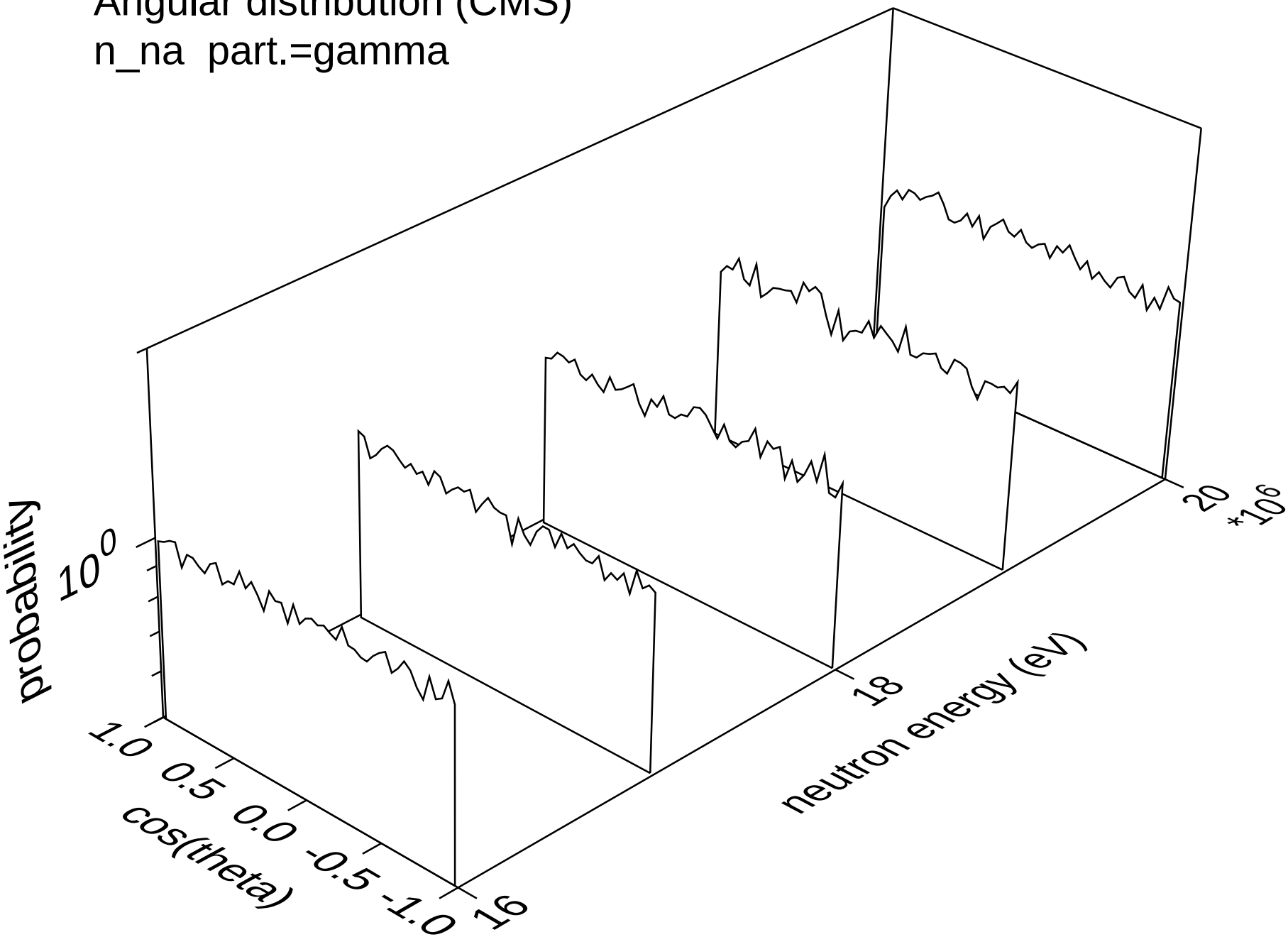

Angular distribution (CMS)
n_2n part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

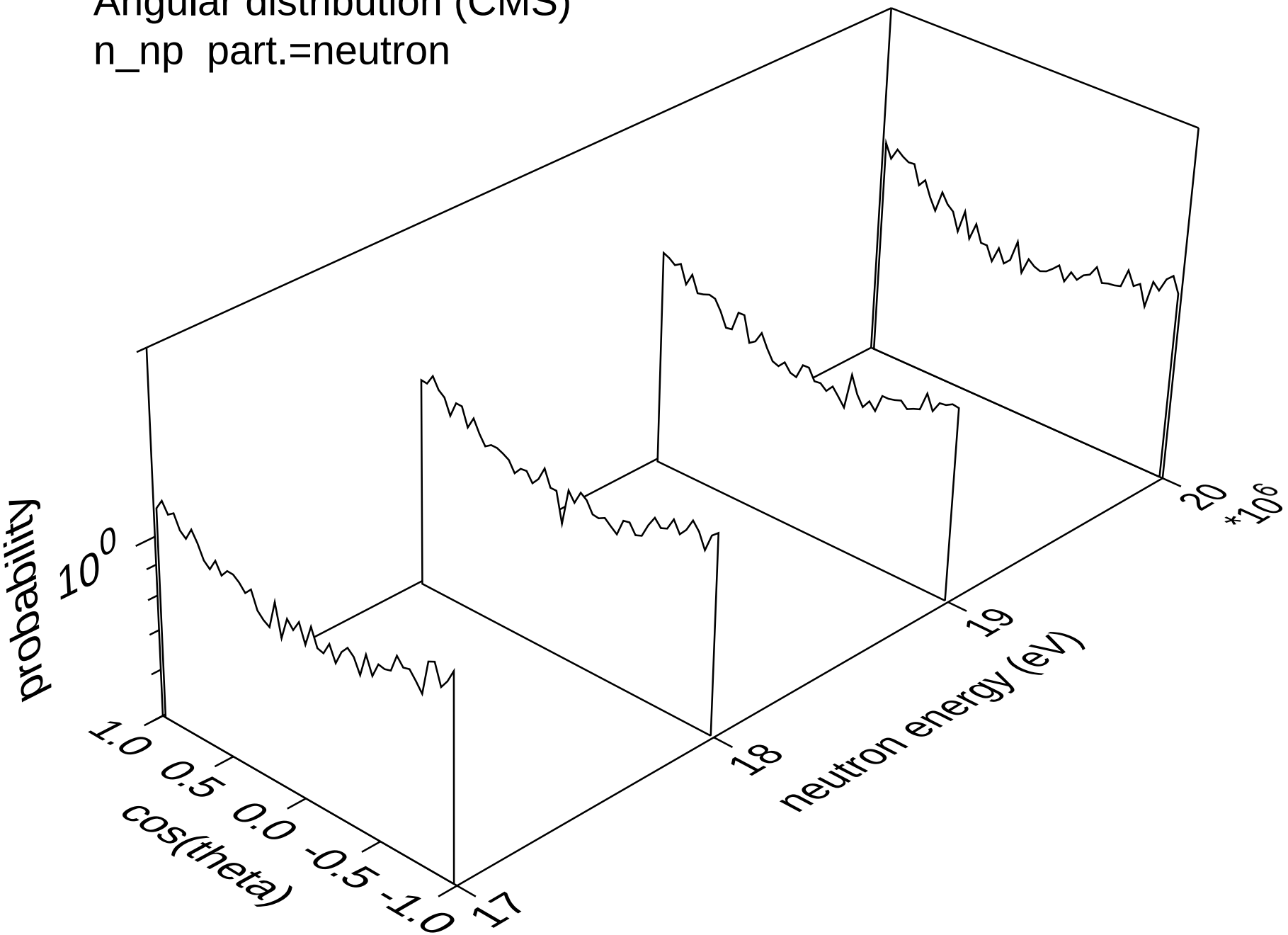

Angular distribution (CMS)
n_3n part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

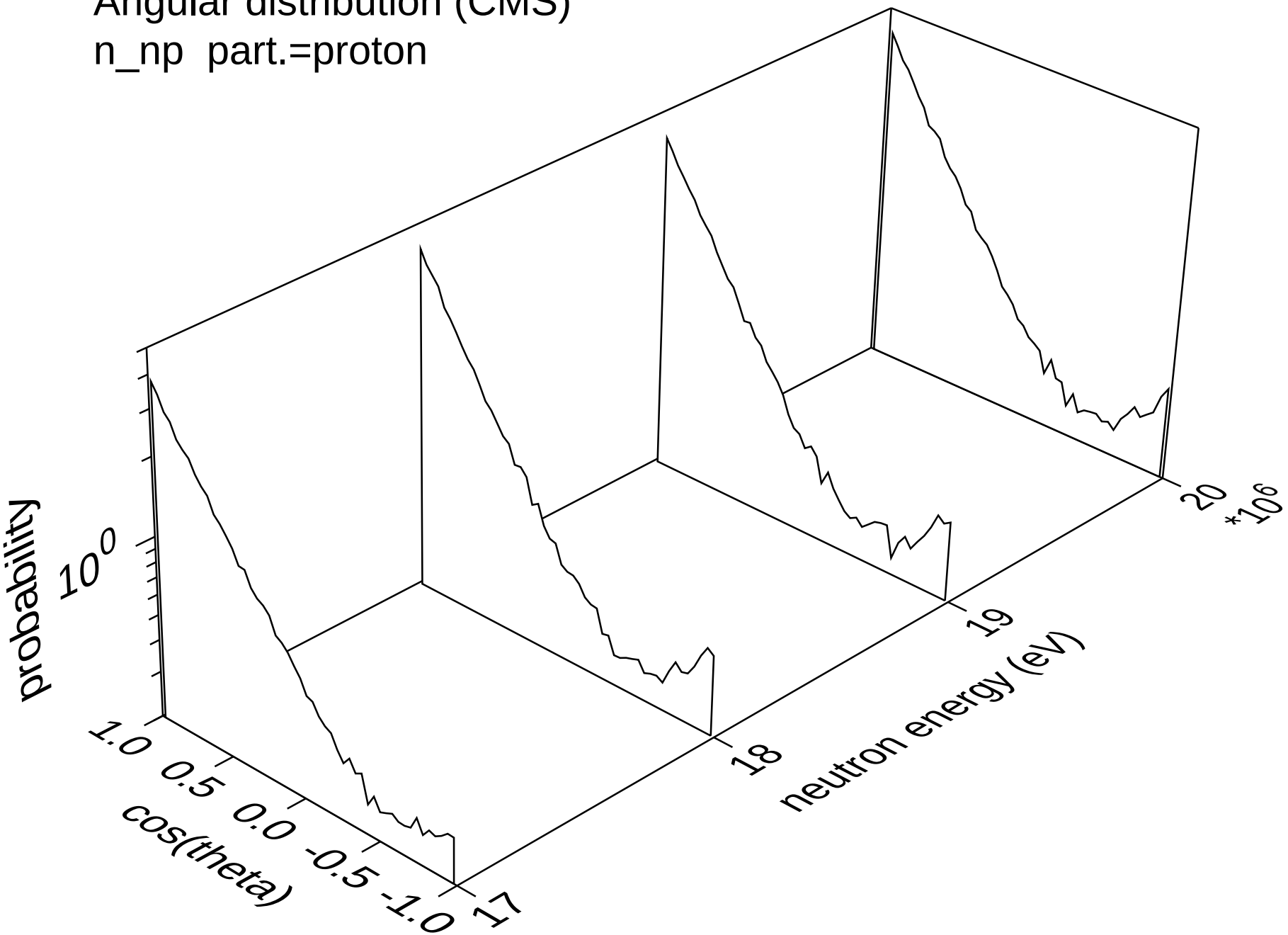

Angular distribution (CMS)
n_3n part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

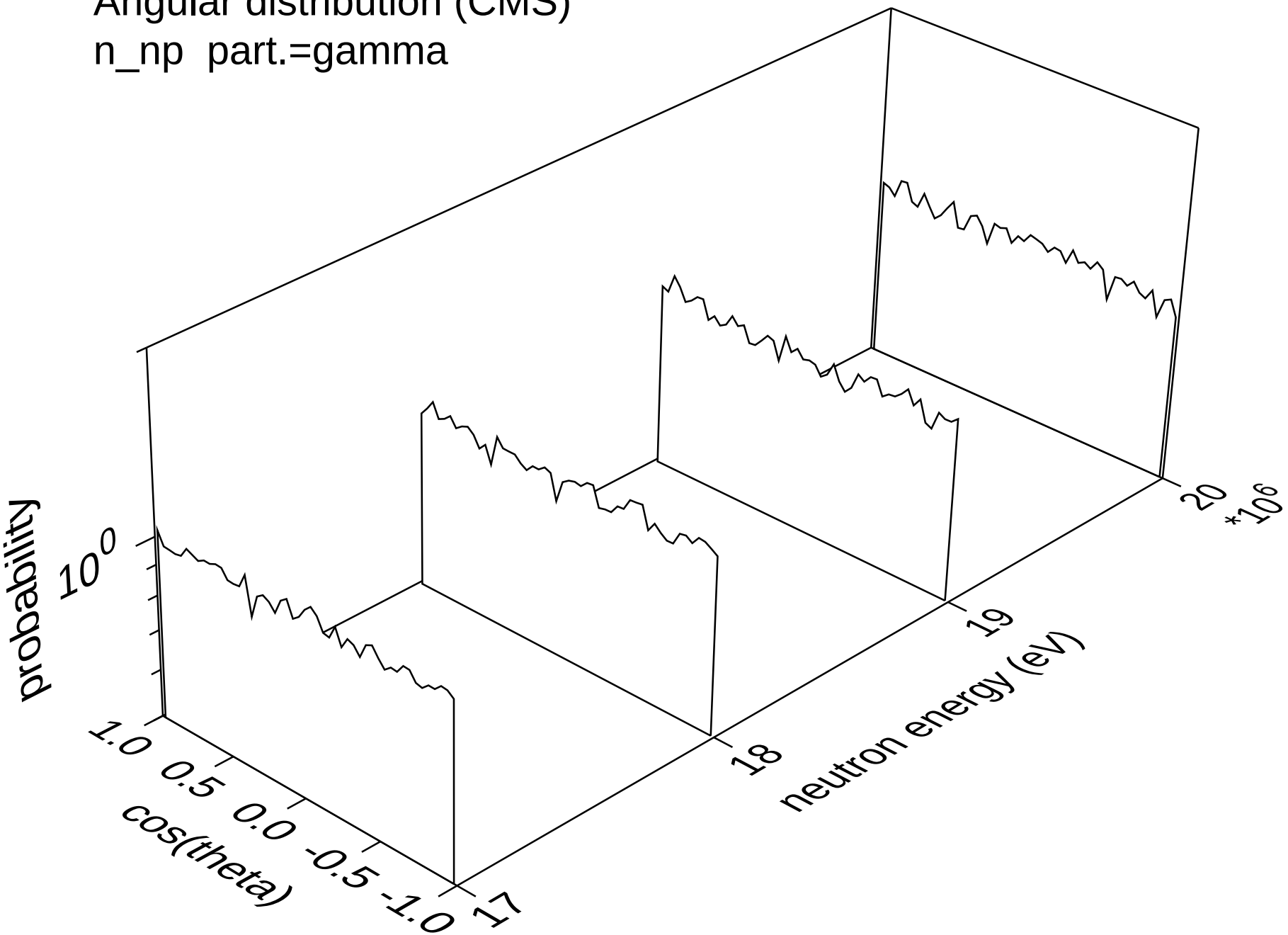

Angular distribution (CMS)
n_na part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

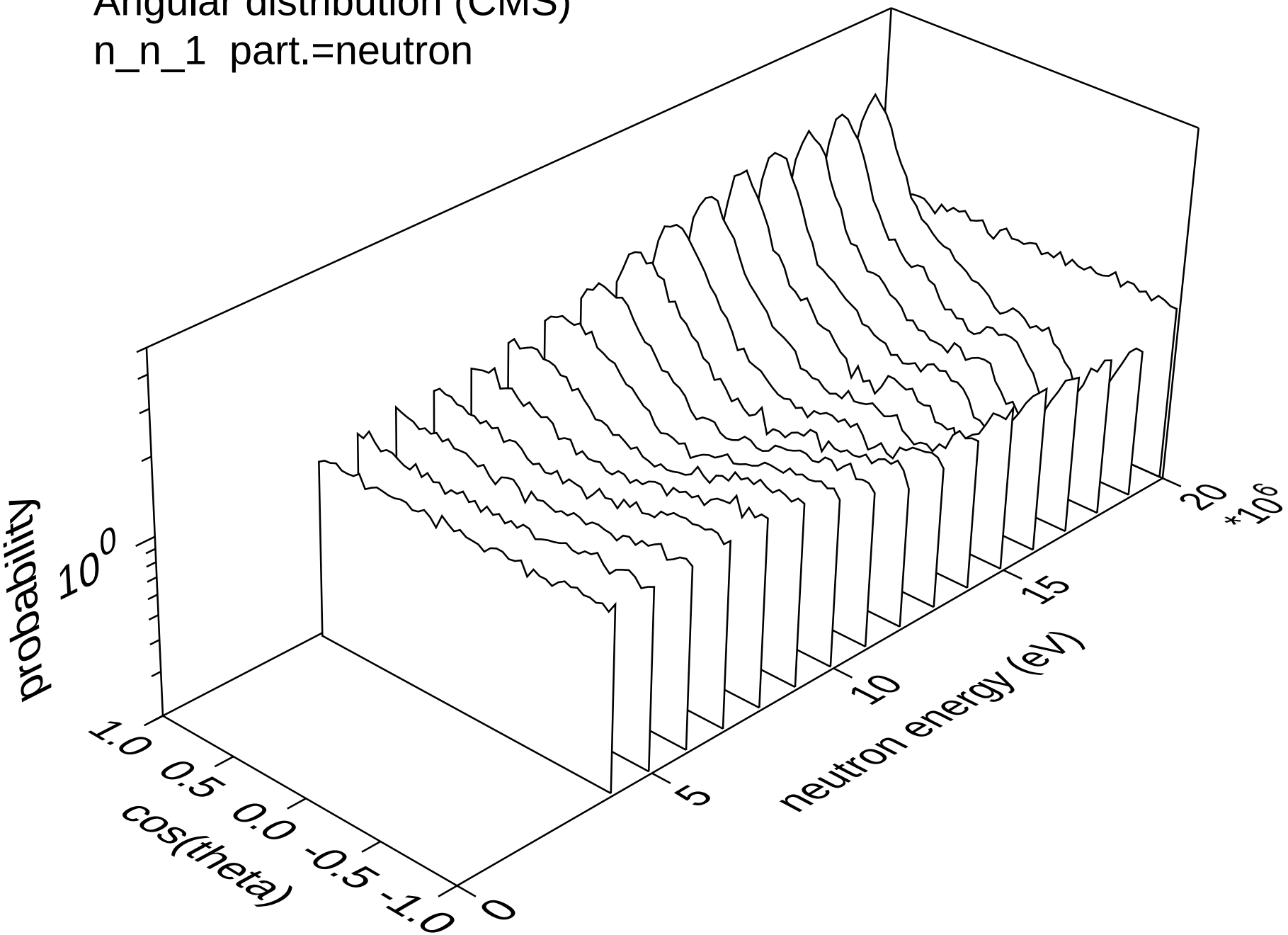

Angular distribution (CMS)
n_na part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

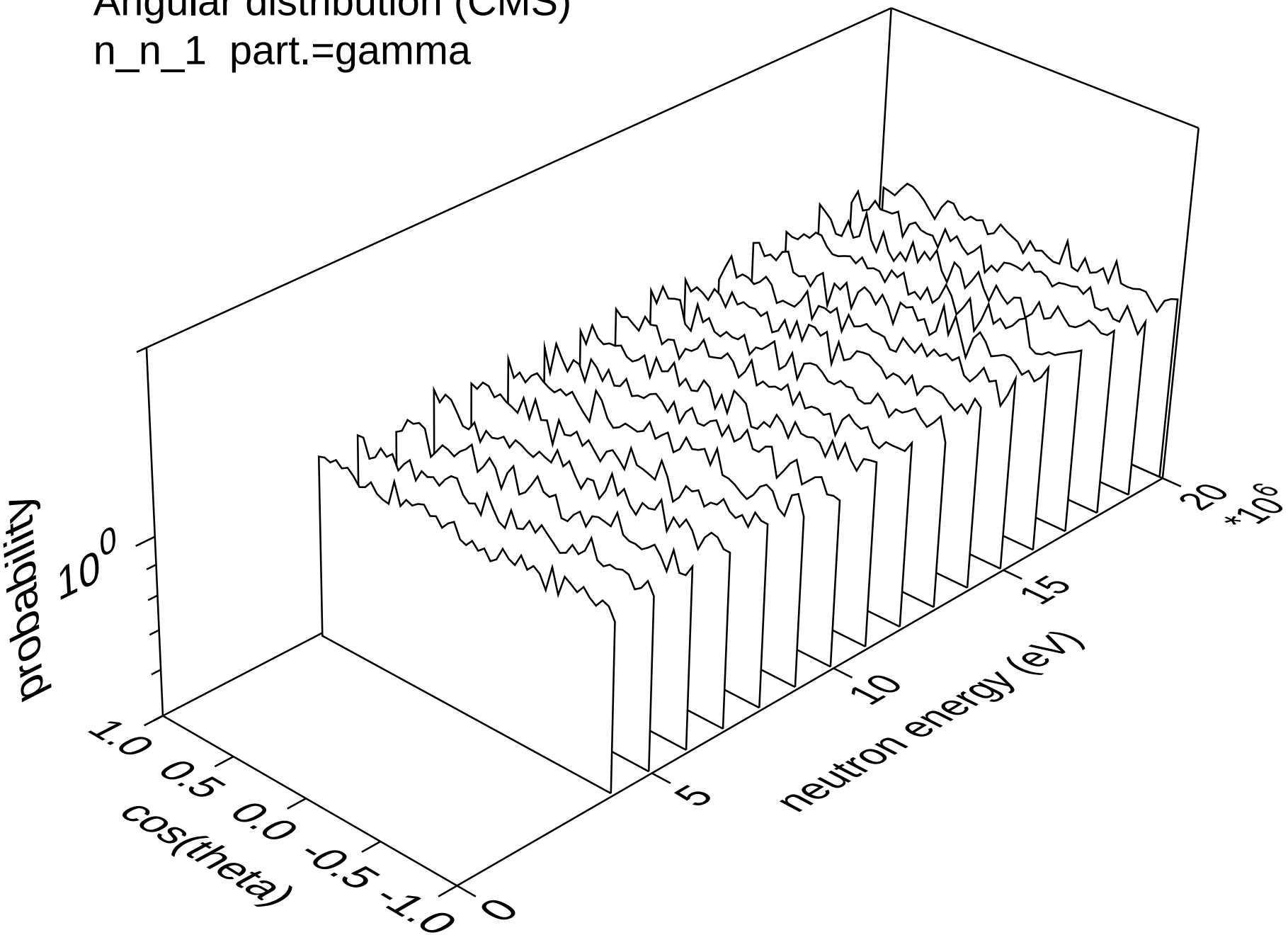

Angular distribution (CMS)
n_na part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

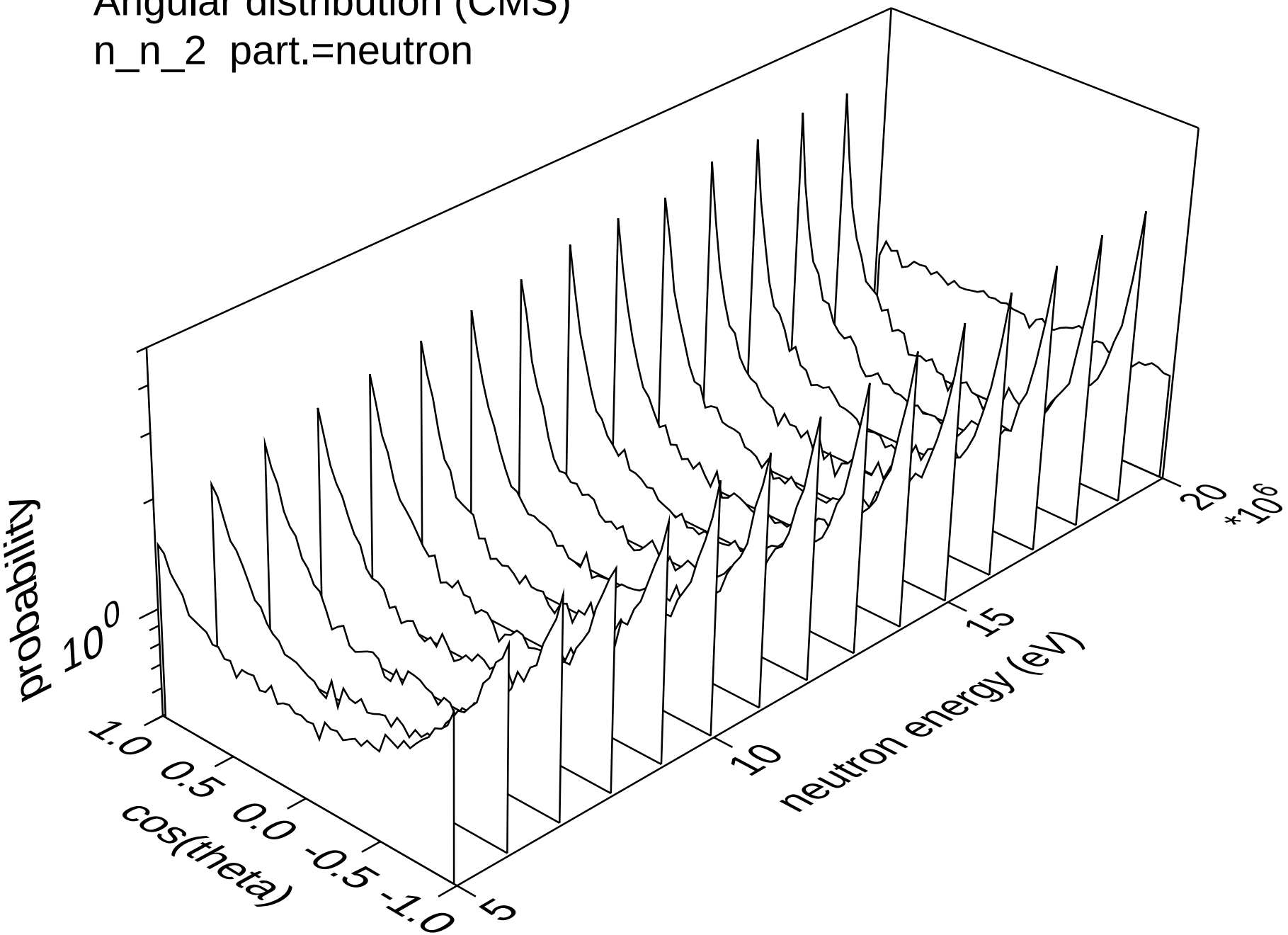

Angular distribution (CMS)
n_np part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

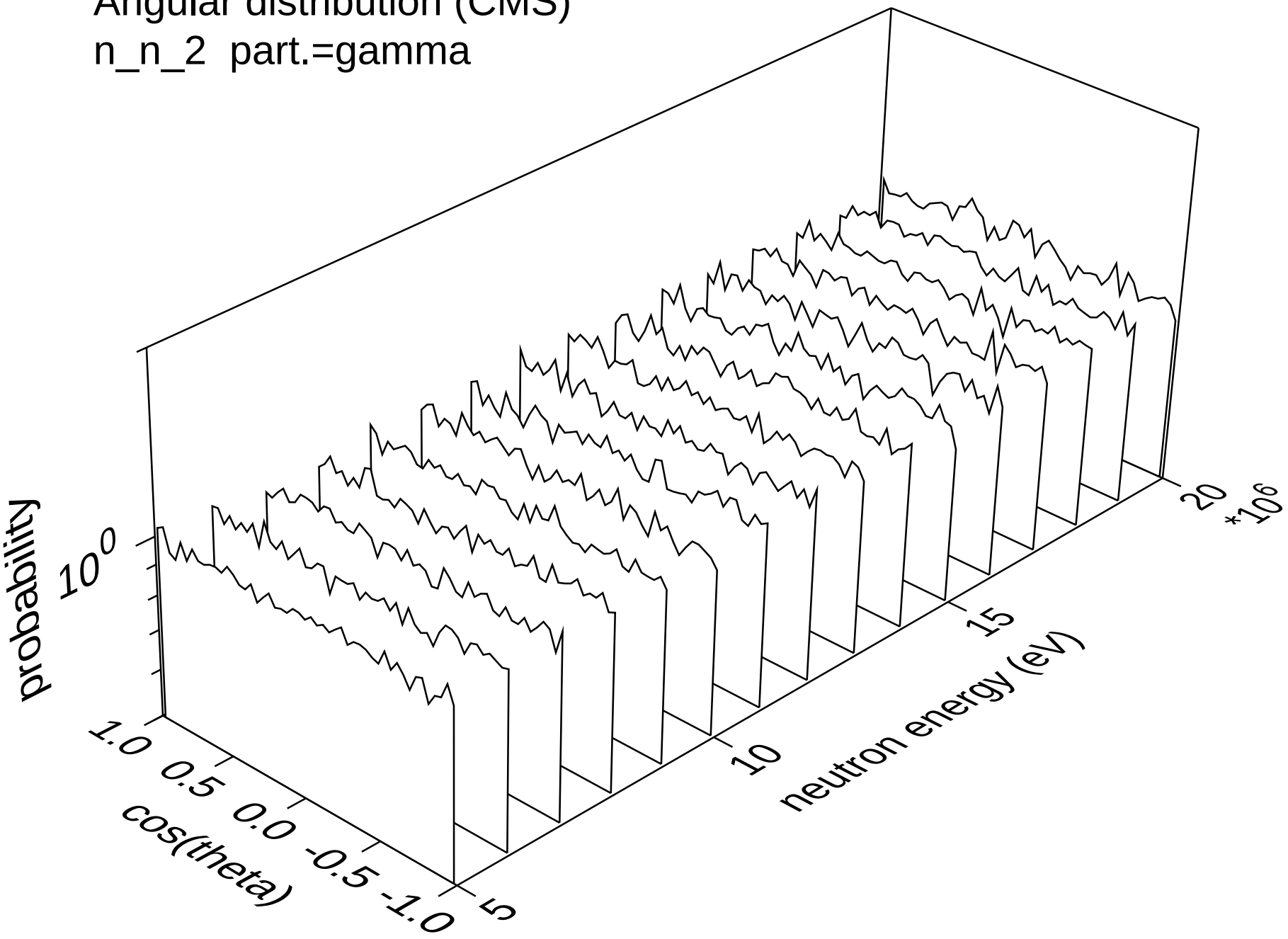

Angular distribution (CMS)
n_np part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

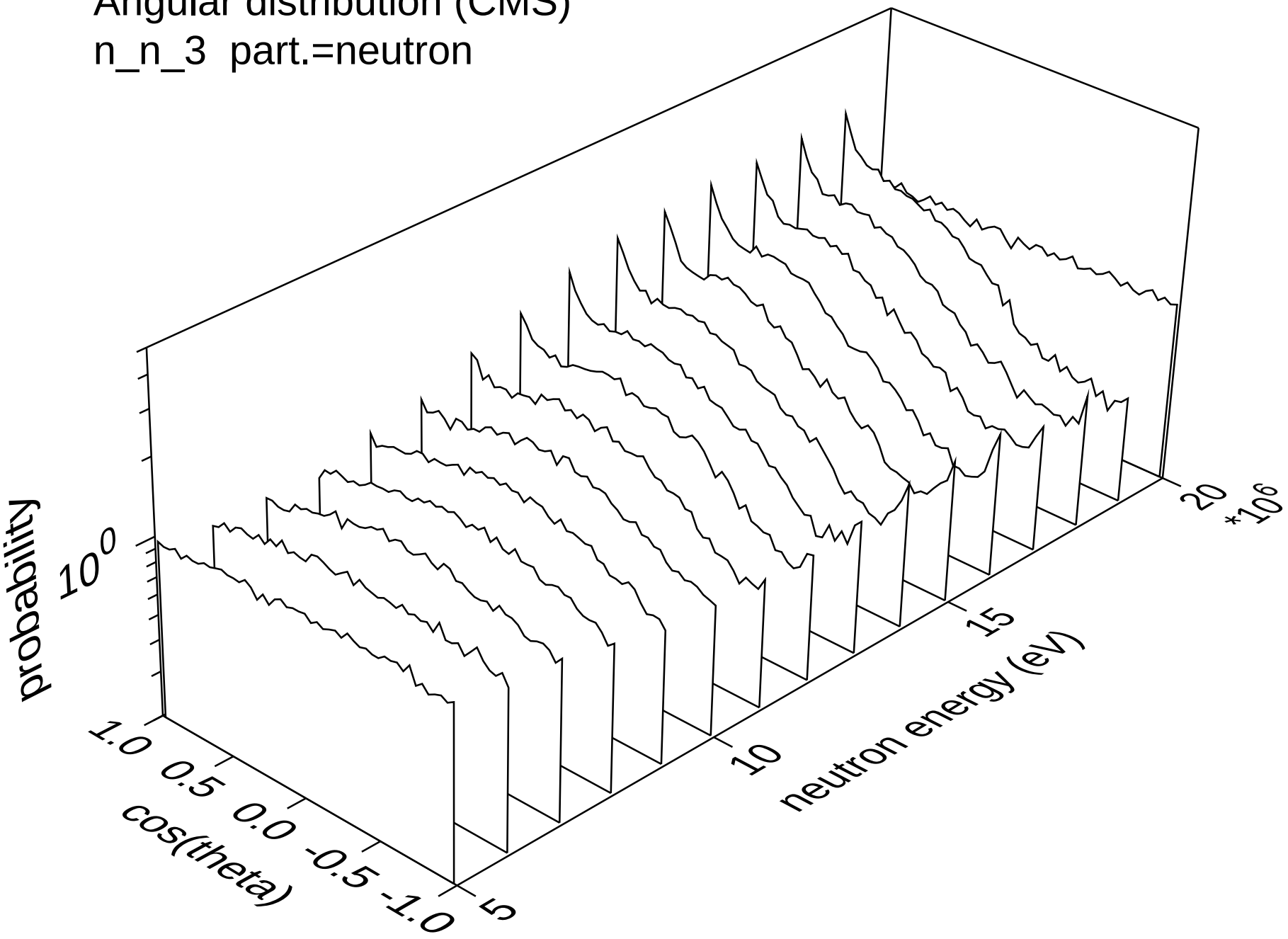

Angular distribution (CMS)
n_np part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

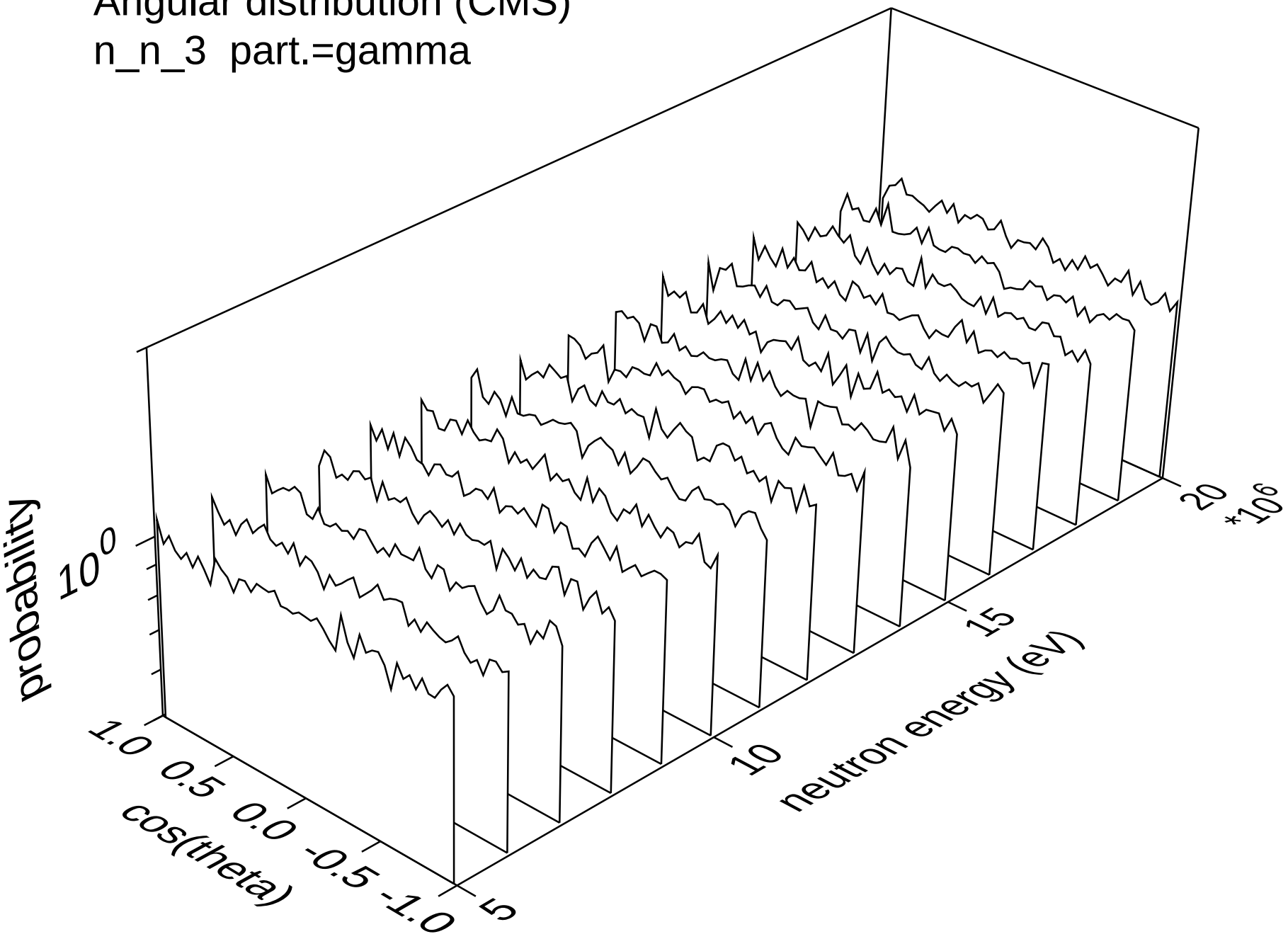

Angular distribution (CMS)
n_n_1 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

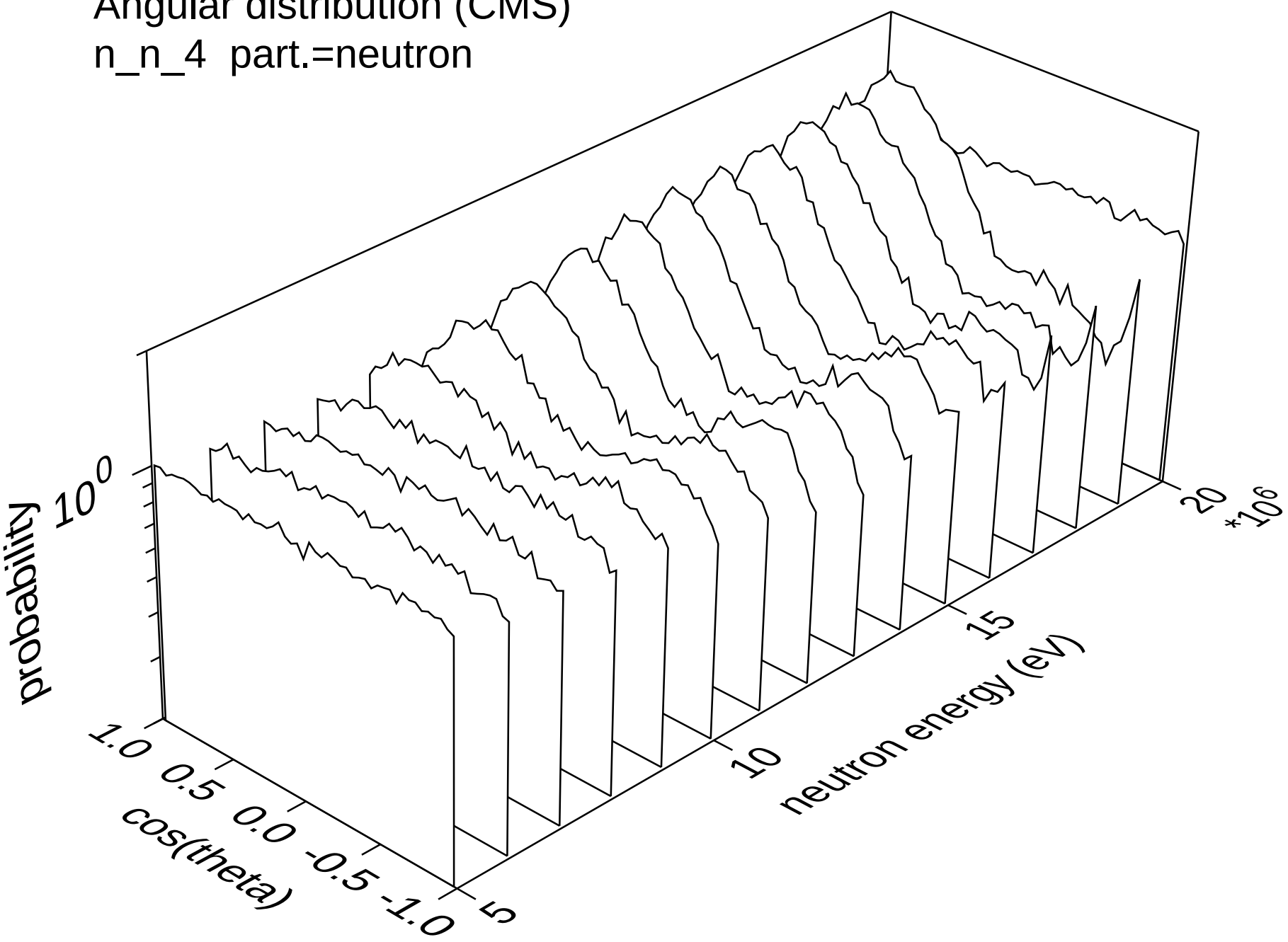

Angular distribution (CMS)
n_n_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
0
5
10
15
20
*10^6
neutron energy (eV)

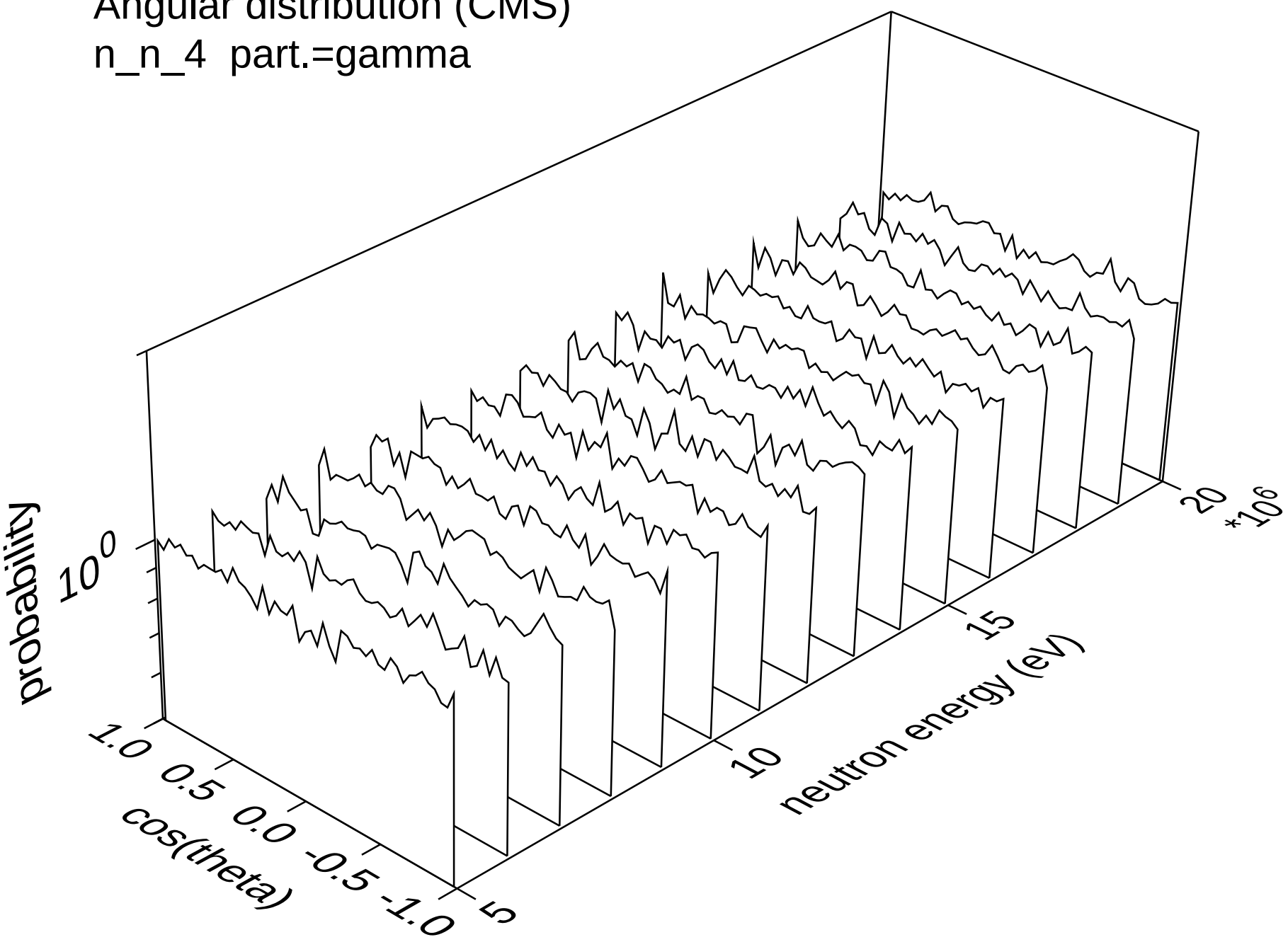

Angular distribution (CMS)
n_n_2 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

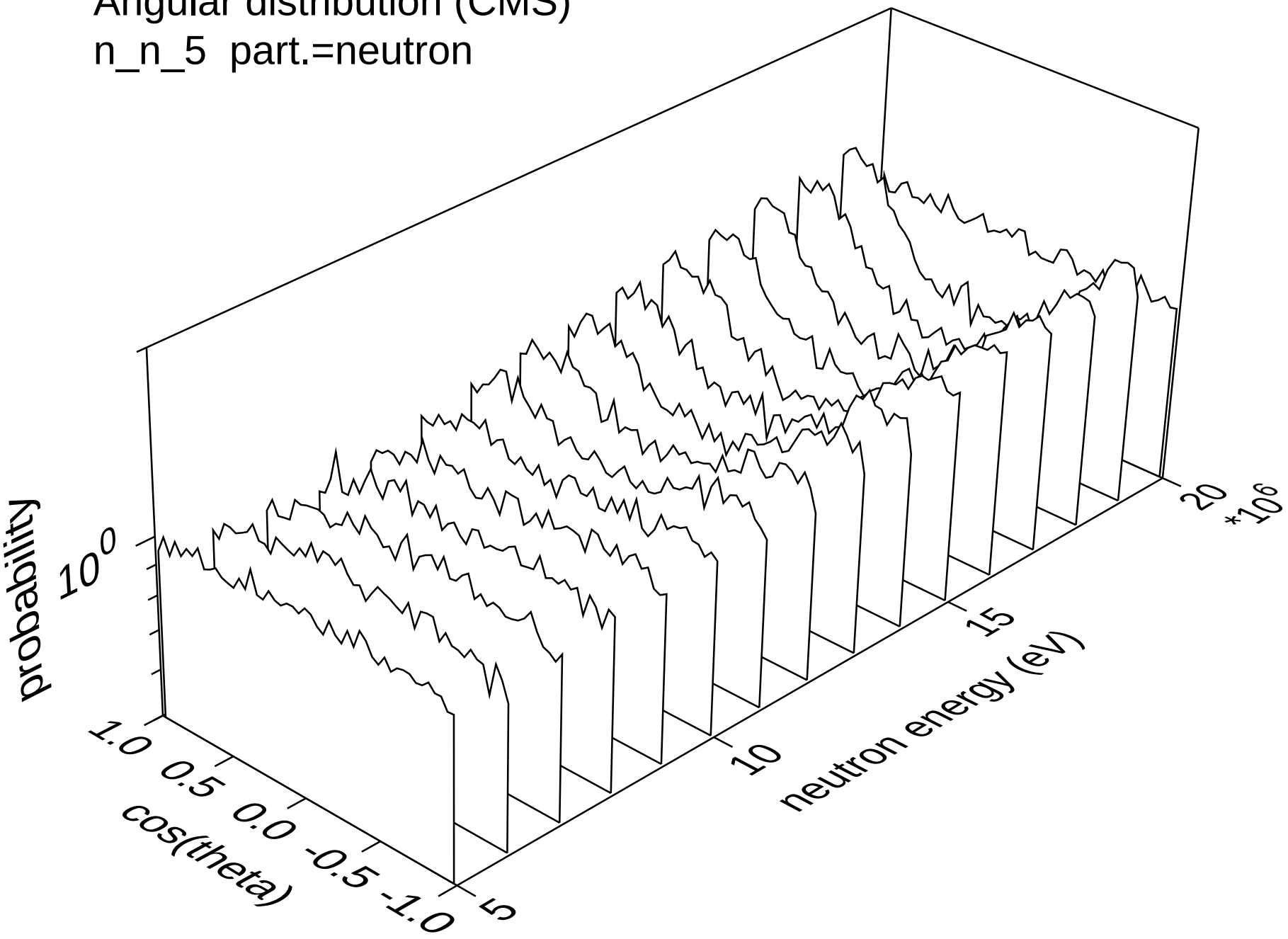

Angular distribution (CMS)
n_n_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

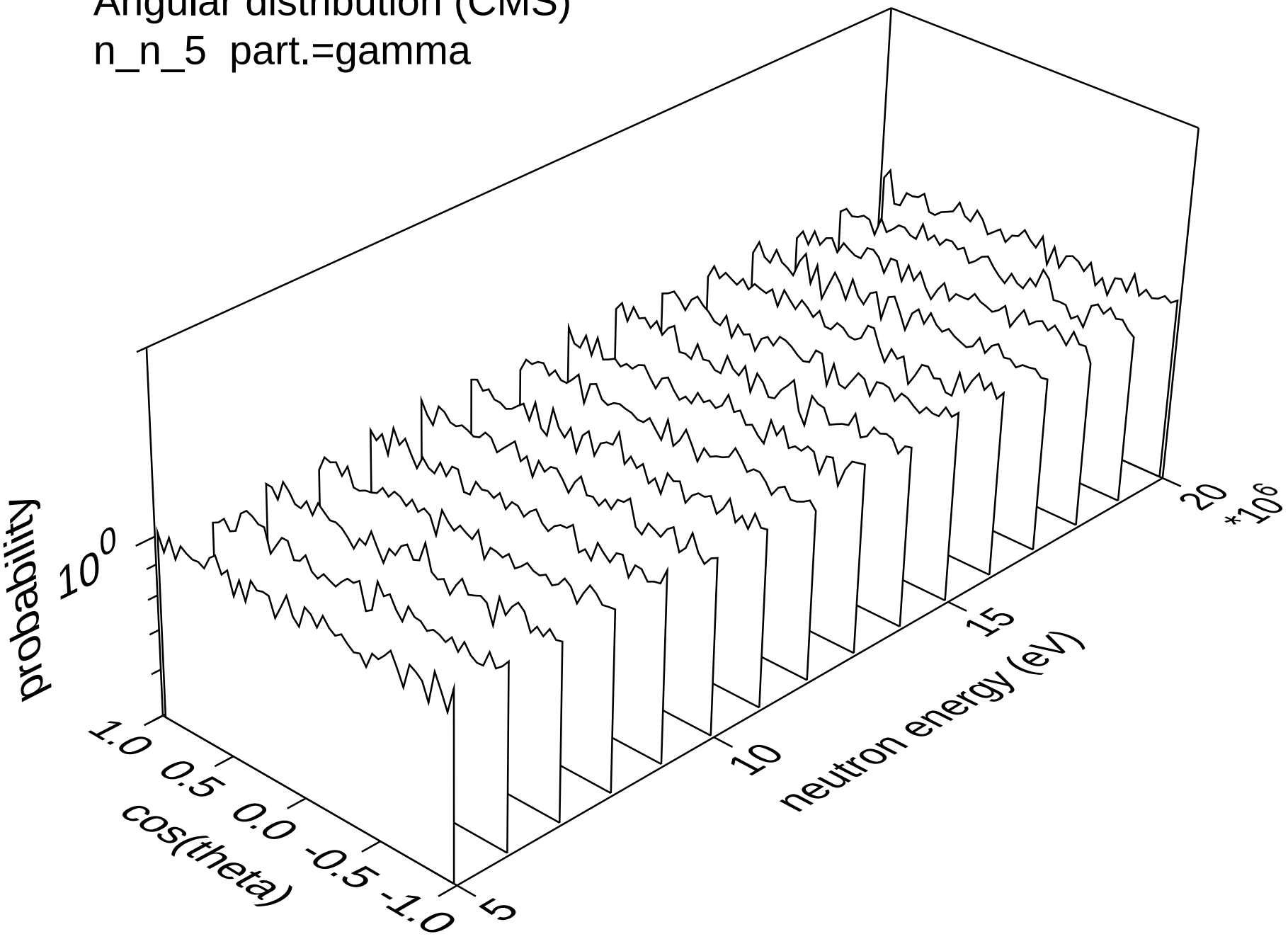

Angular distribution (CMS)
n_n_3 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

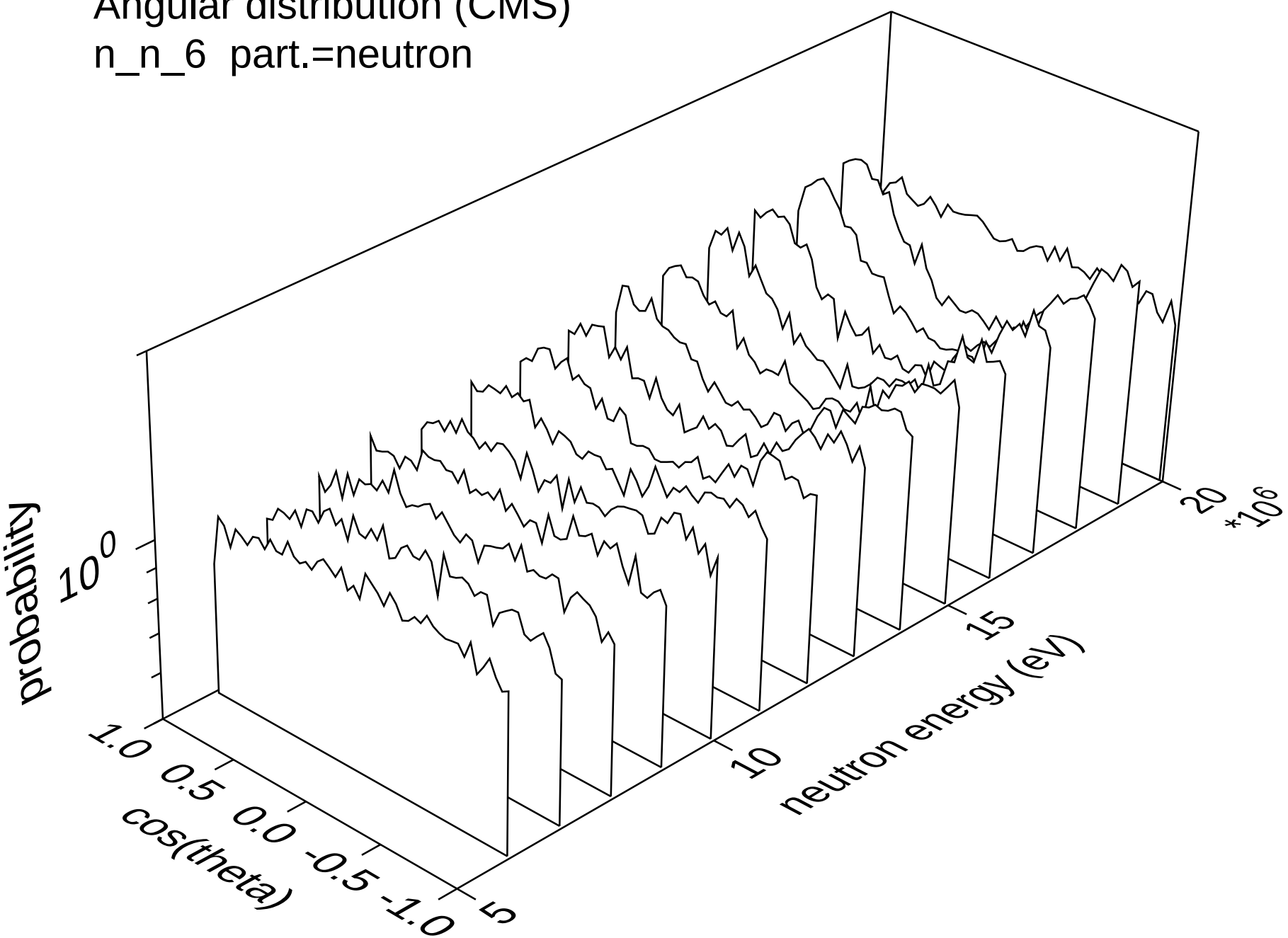

Angular distribution (CMS)
n_n_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

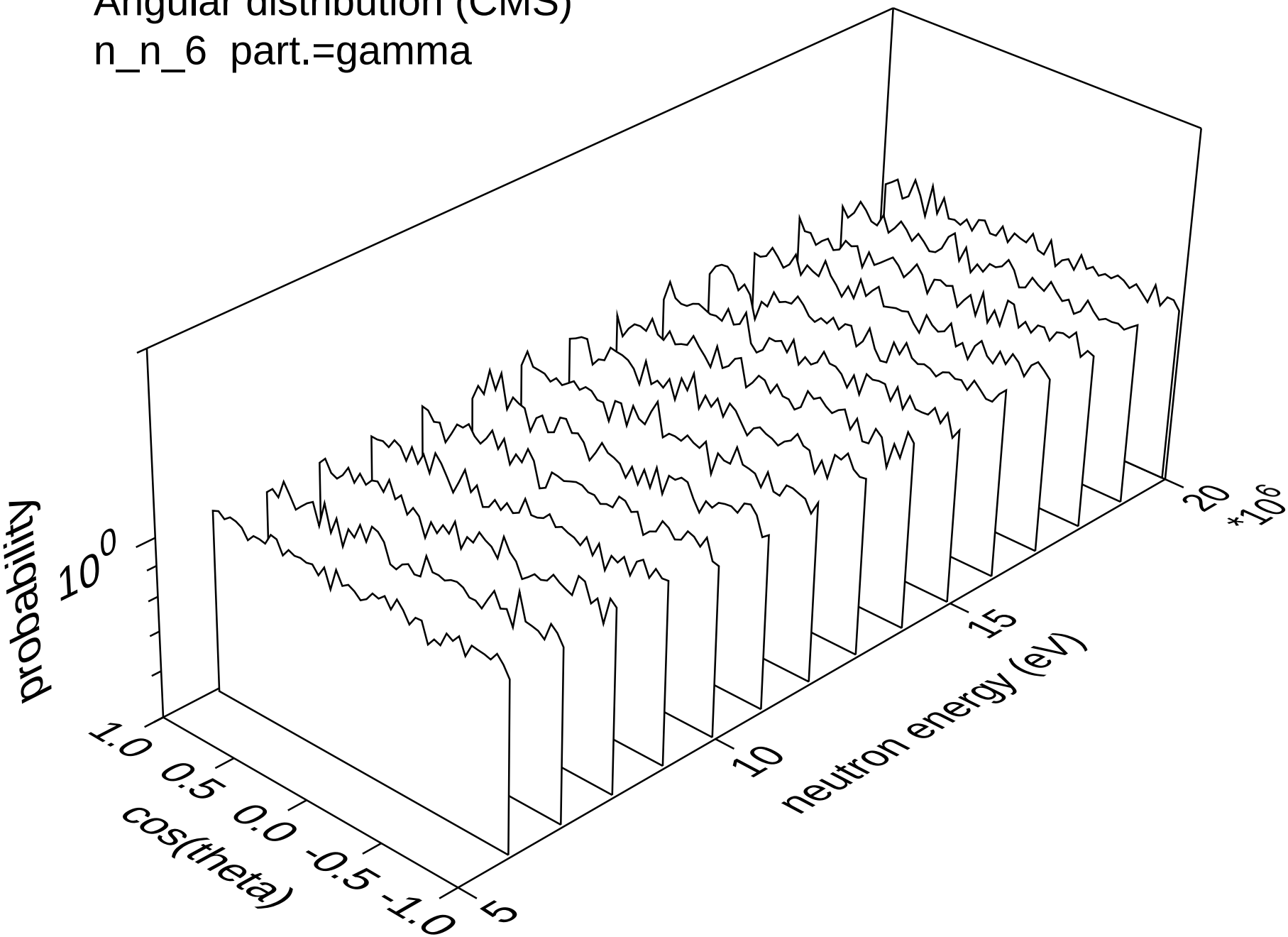

Angular distribution (CMS)
n_n_4 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

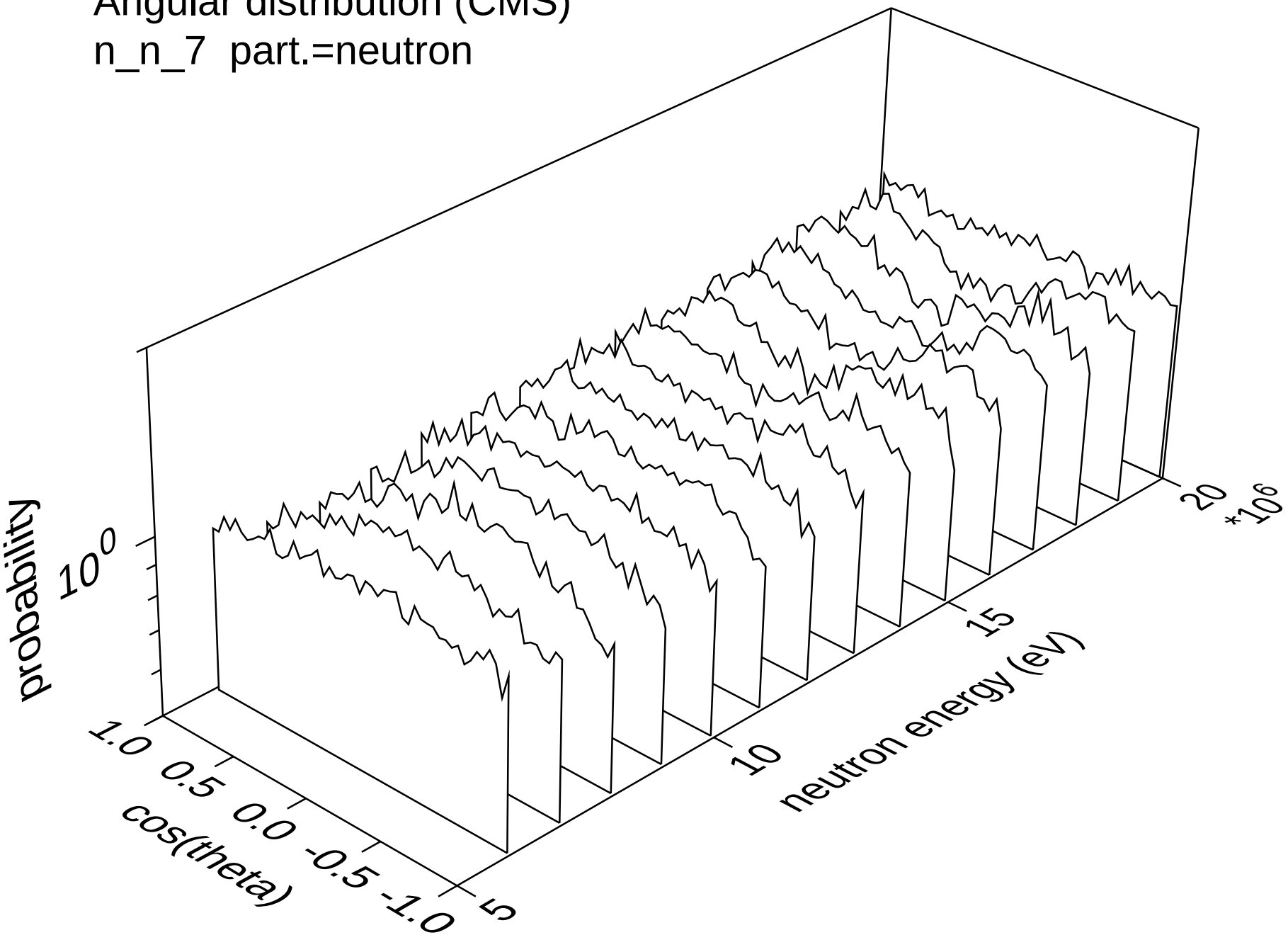

Angular distribution (CMS)
n_n_4 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

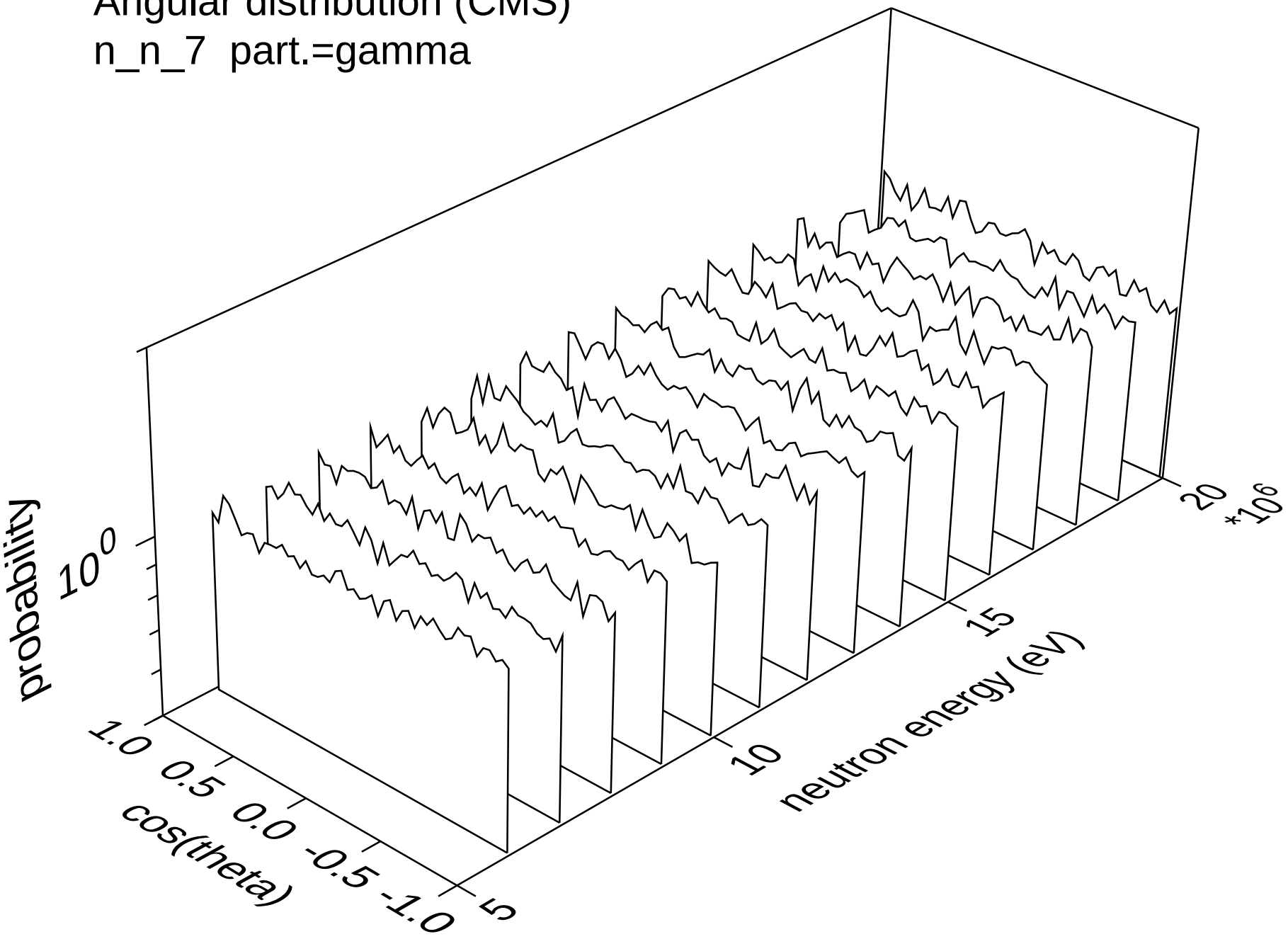

Angular distribution (CMS)
n_n_5 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

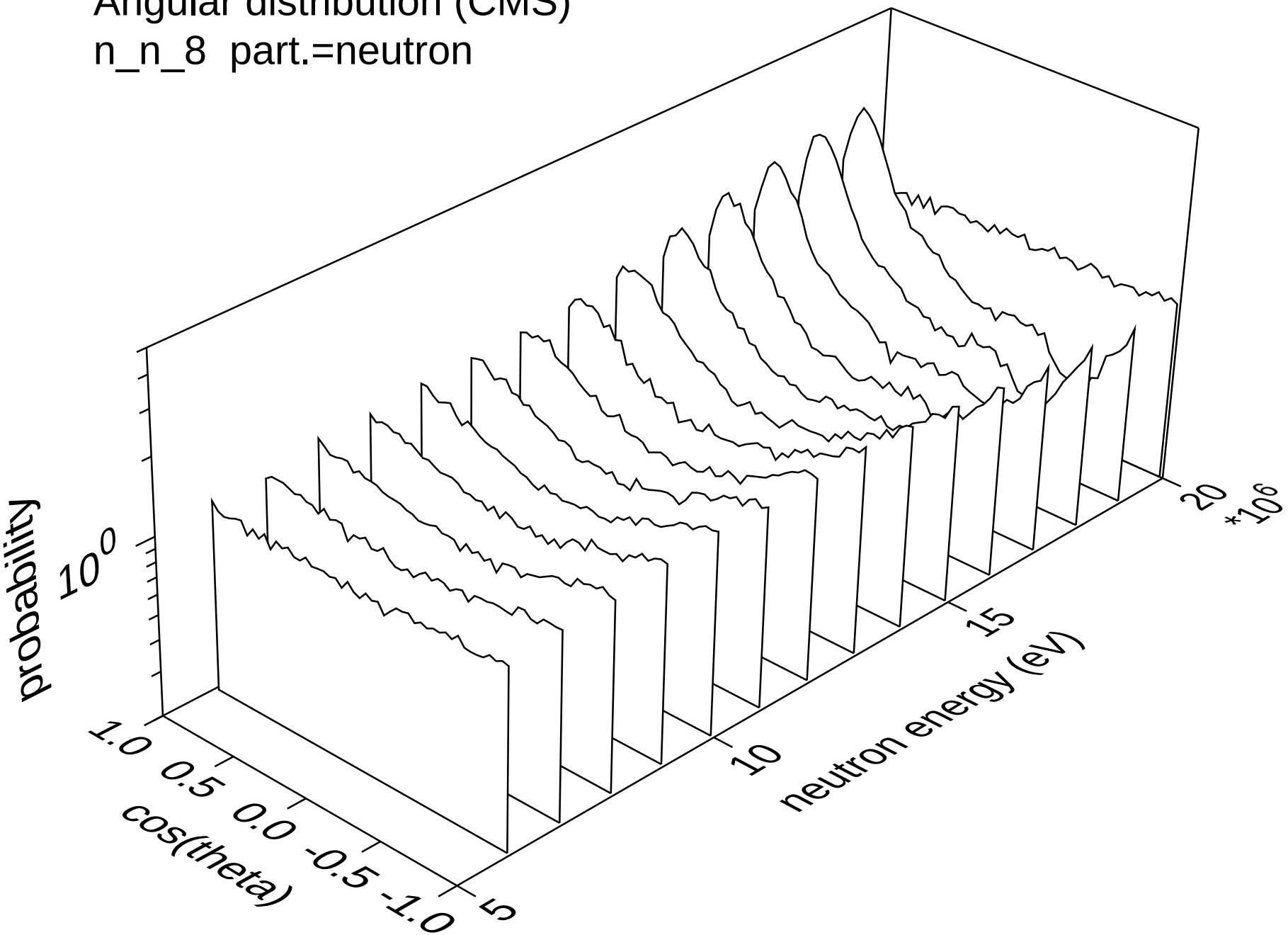

Angular distribution (CMS)
n_n_5 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

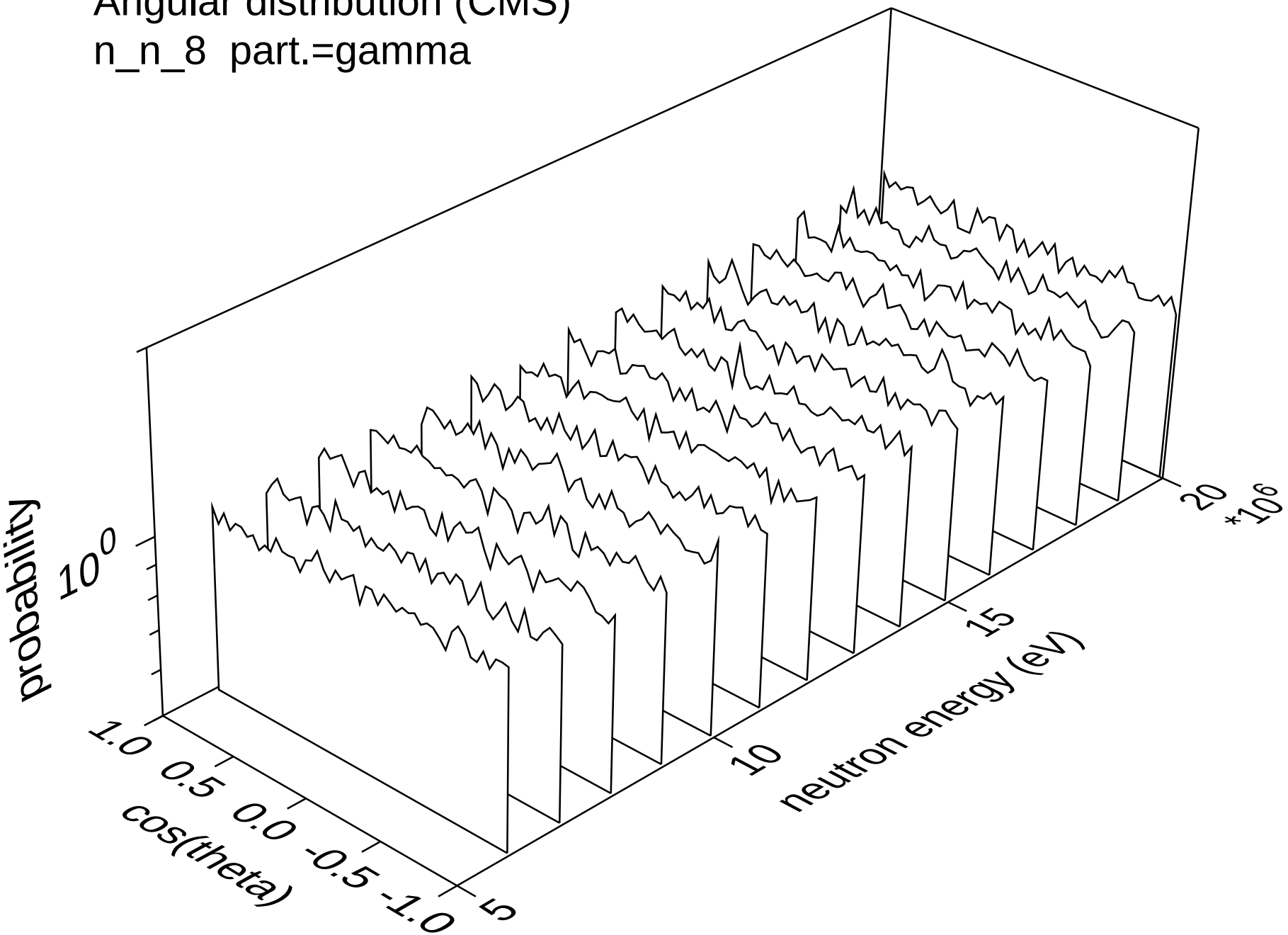

Angular distribution (CMS)
n_n_6 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

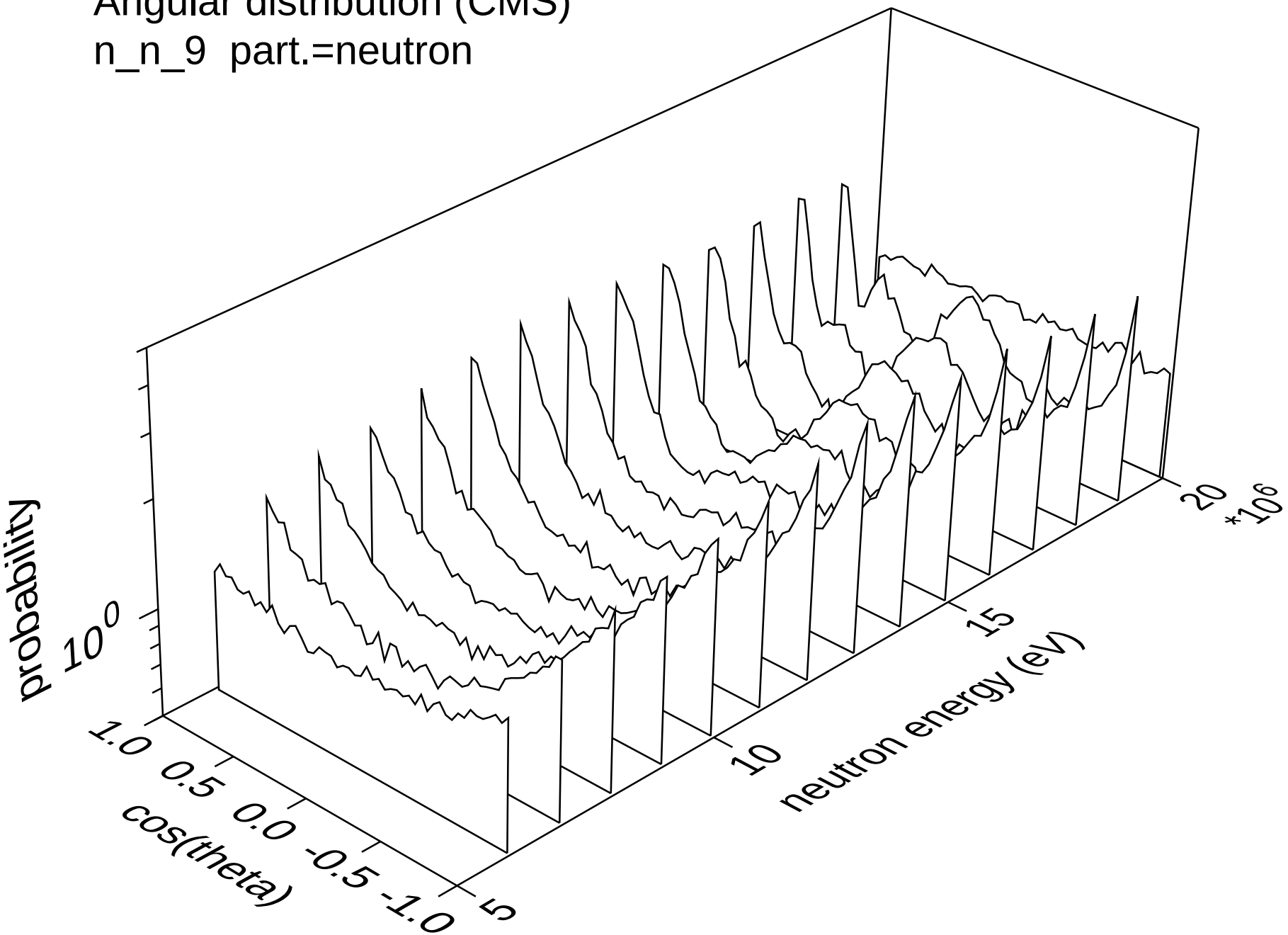

Angular distribution (CMS)
n_n_6 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

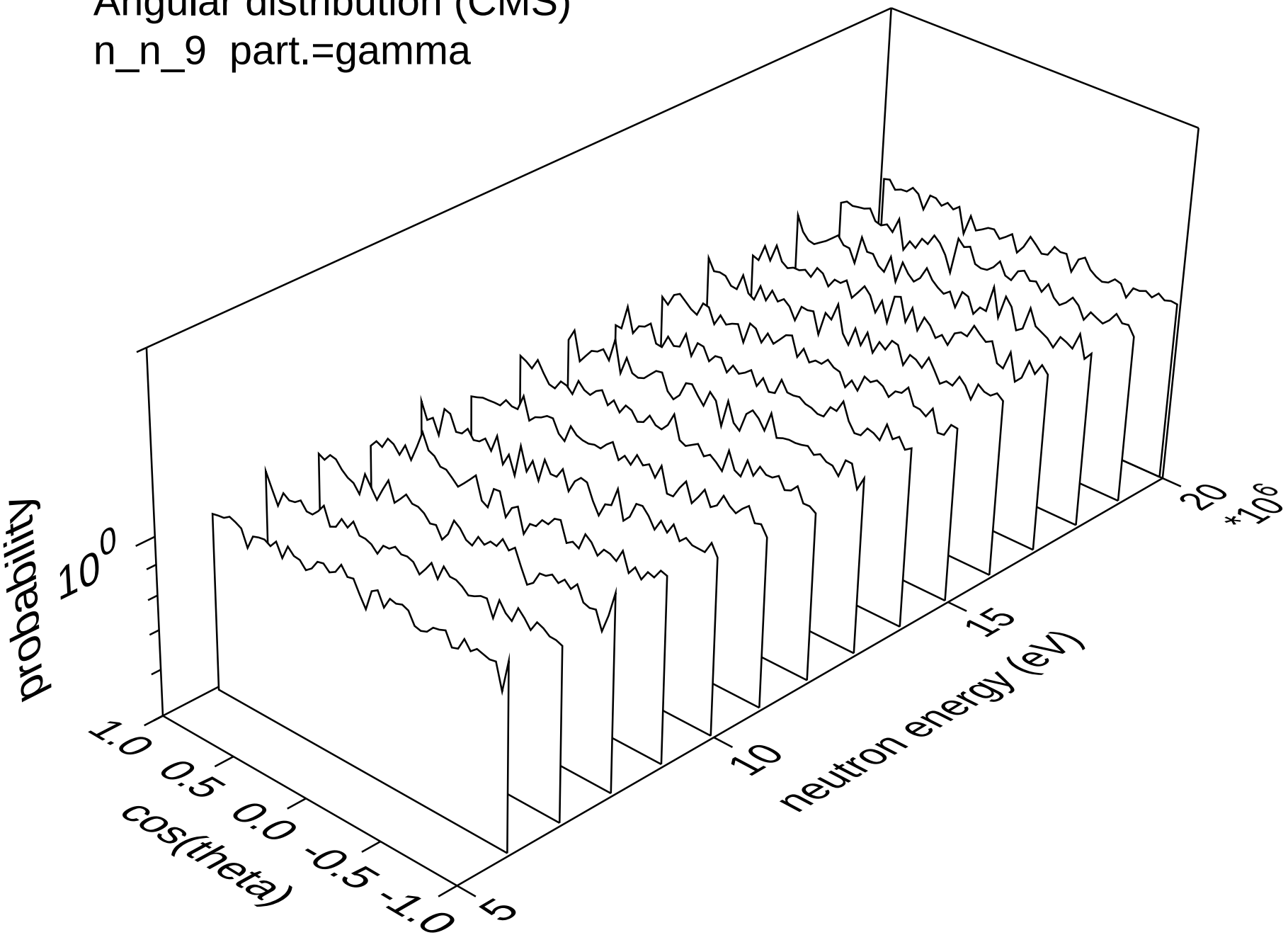

Angular distribution (CMS)
n_n_7 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

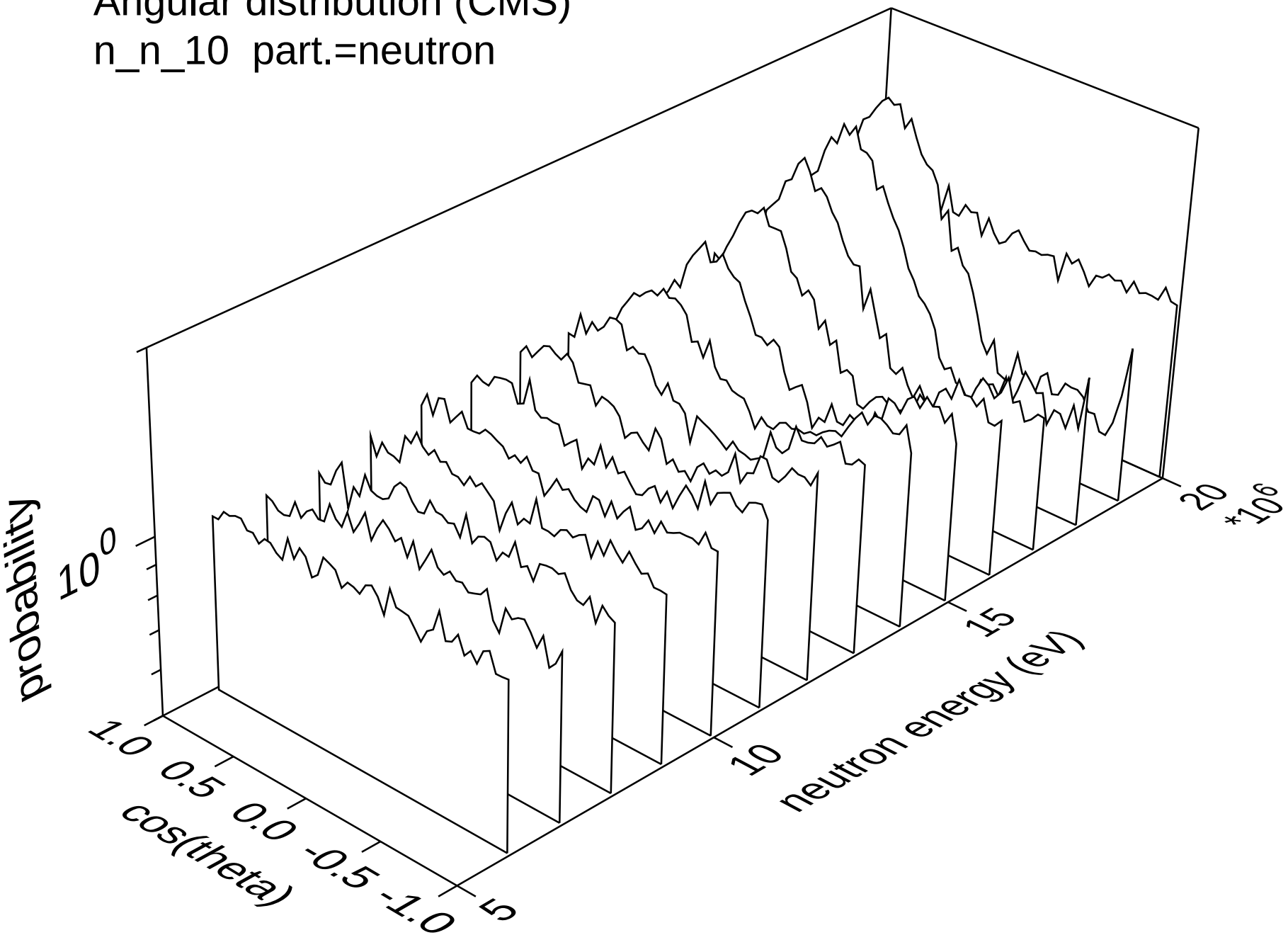

Angular distribution (CMS)
n_n_7 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

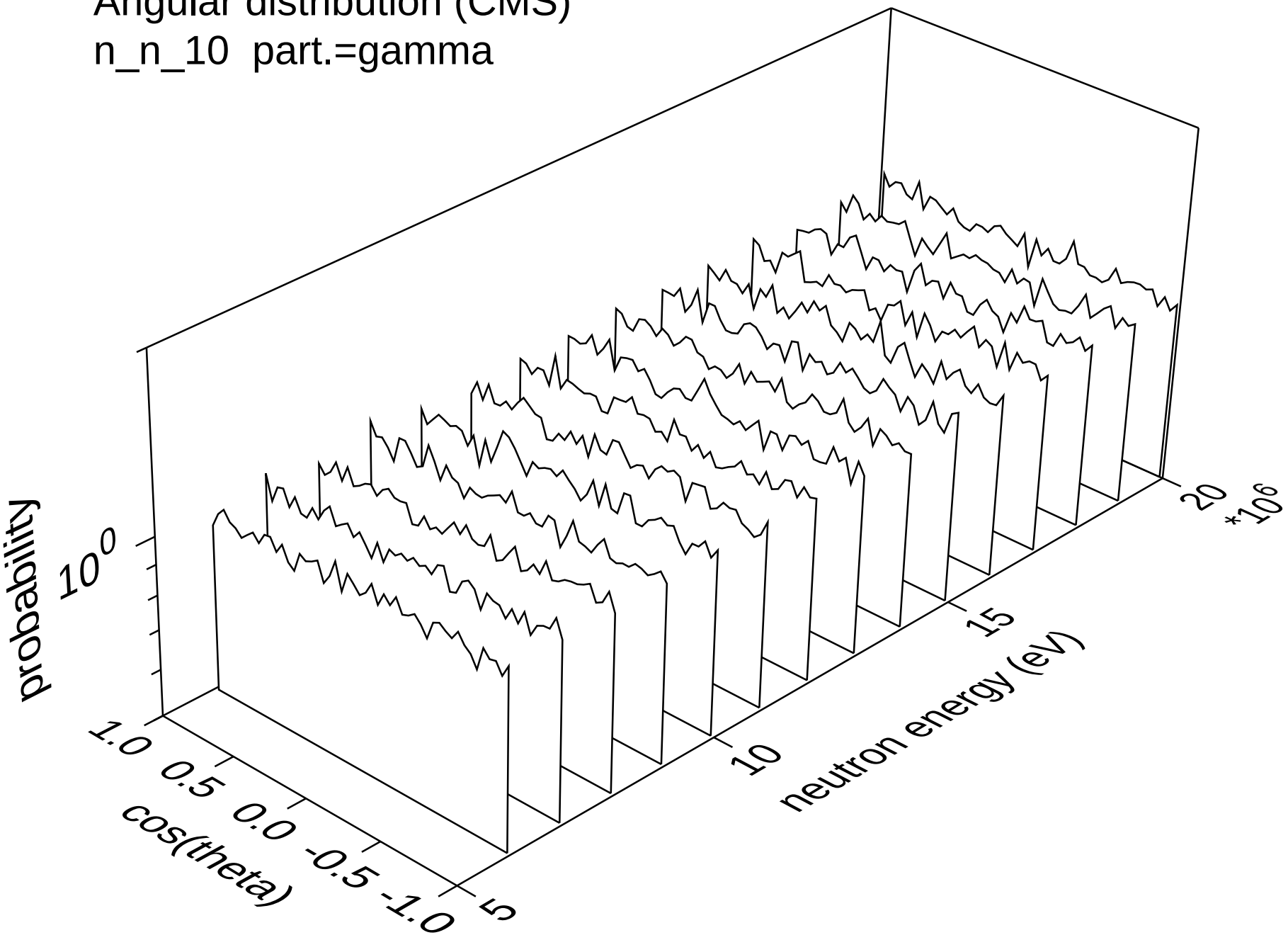

Angular distribution (CMS)
n_n_8 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

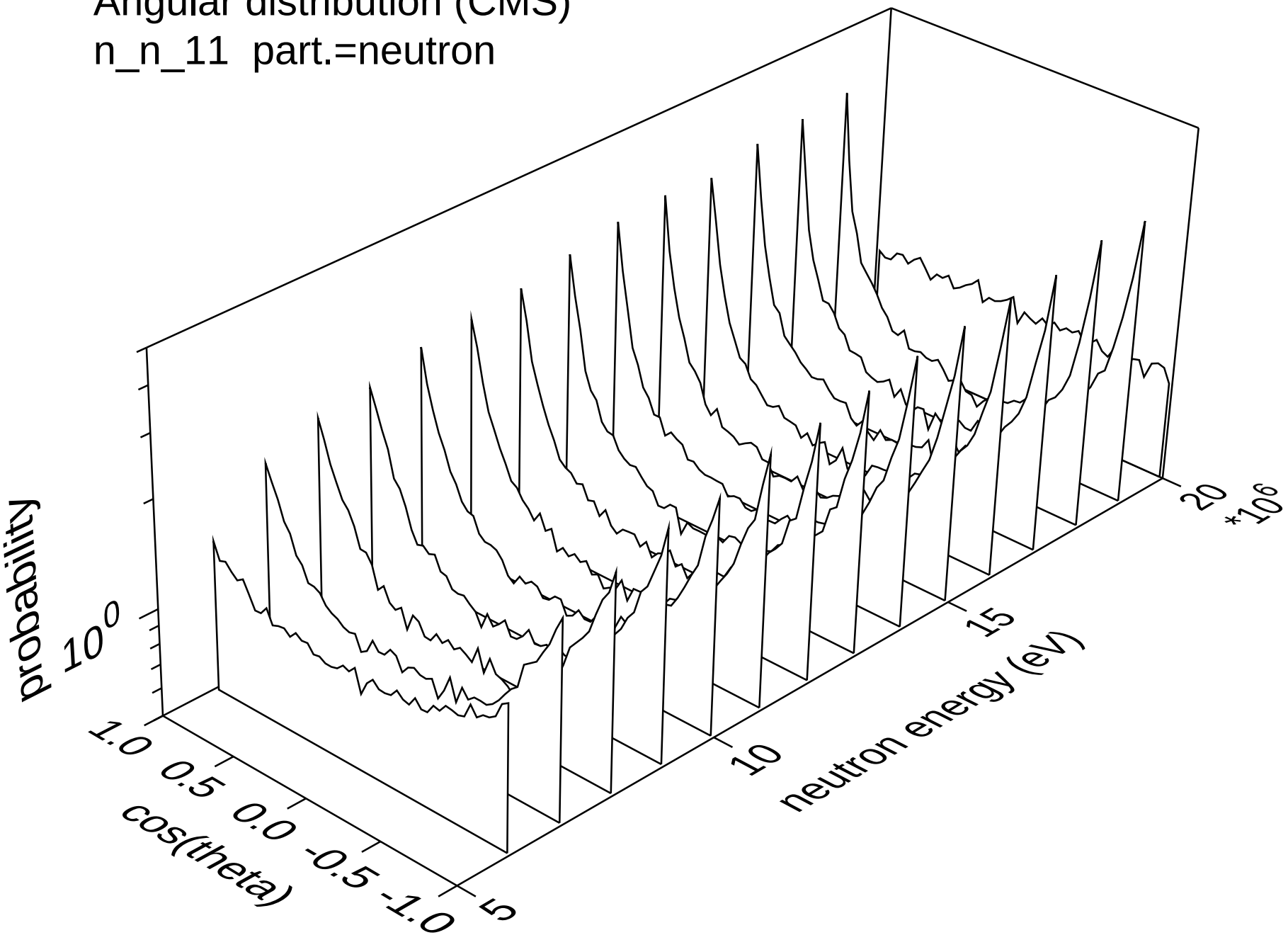

Angular distribution (CMS)
n_n_8 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

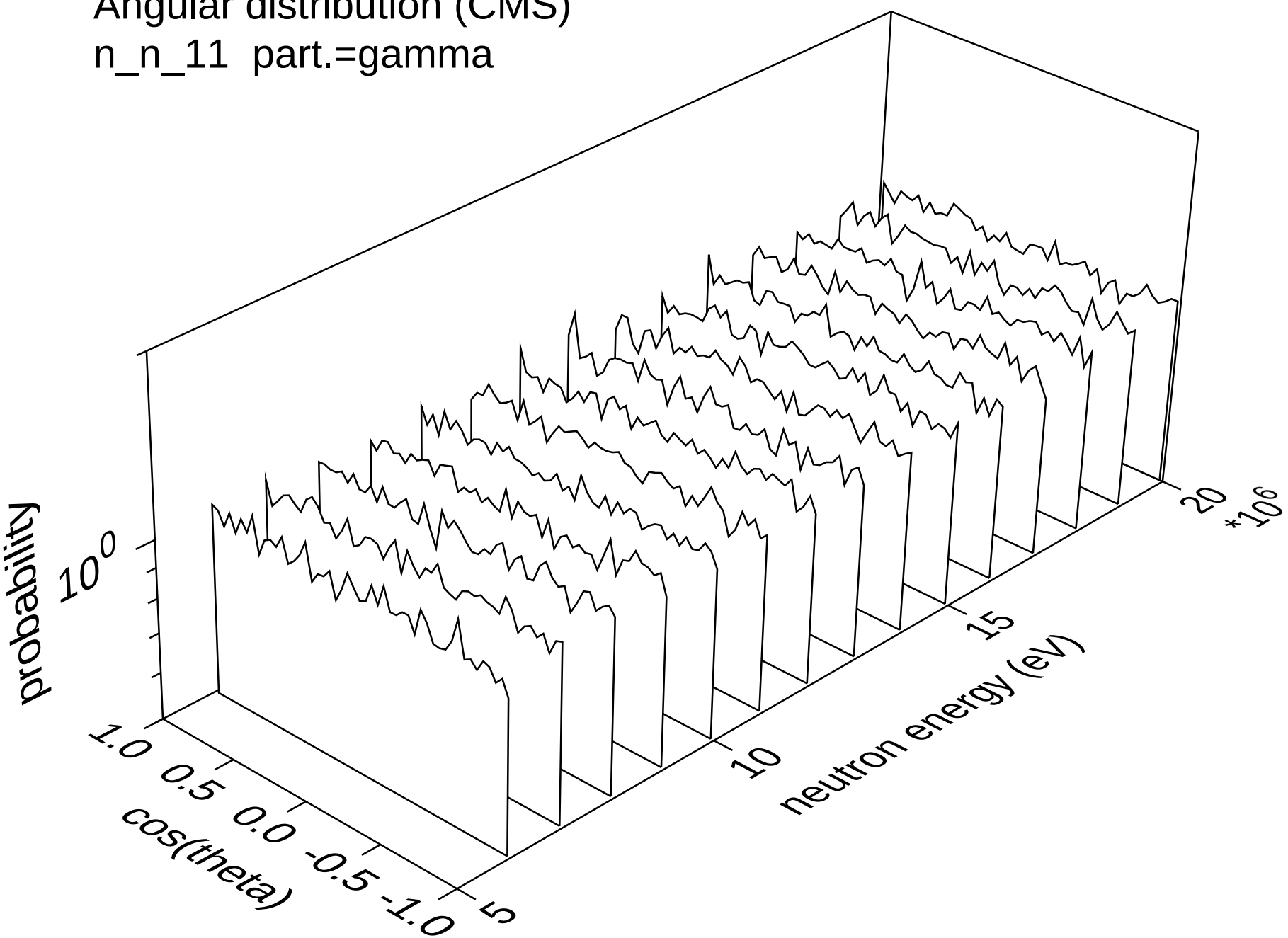

Angular distribution (CMS)
n_n_9 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

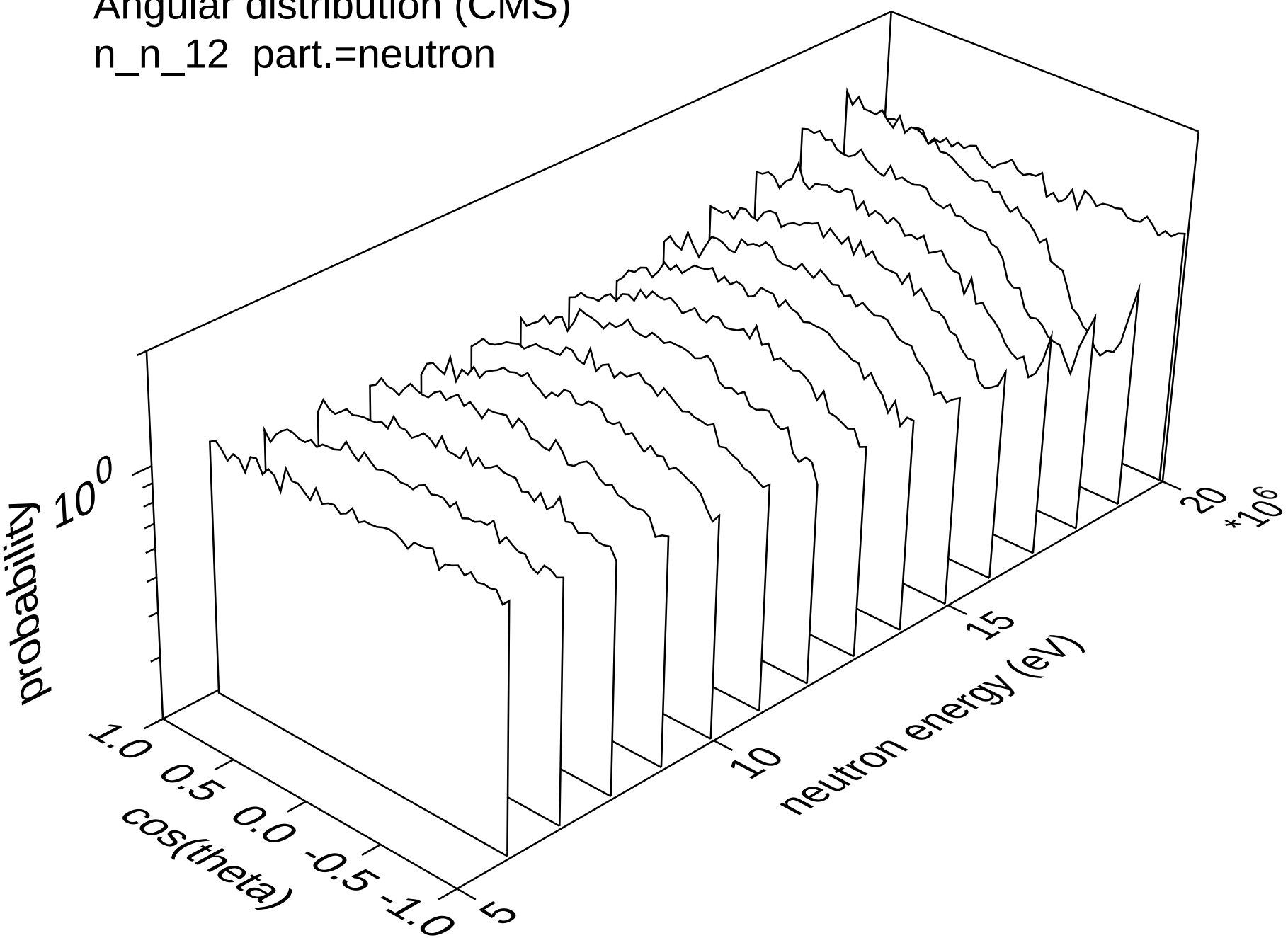

Angular distribution (CMS)
n_n_9 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

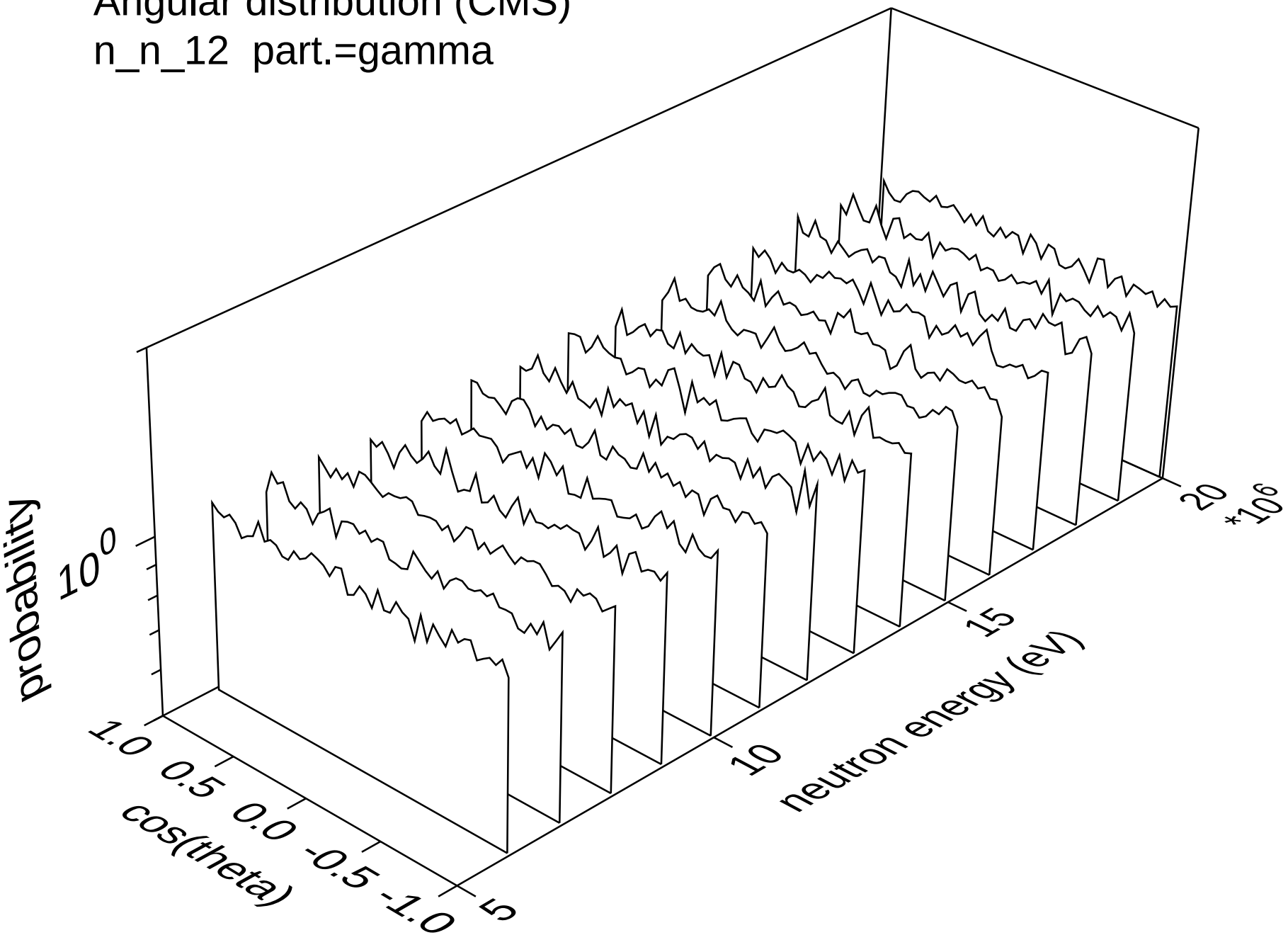

Angular distribution (CMS)
n_n_10 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

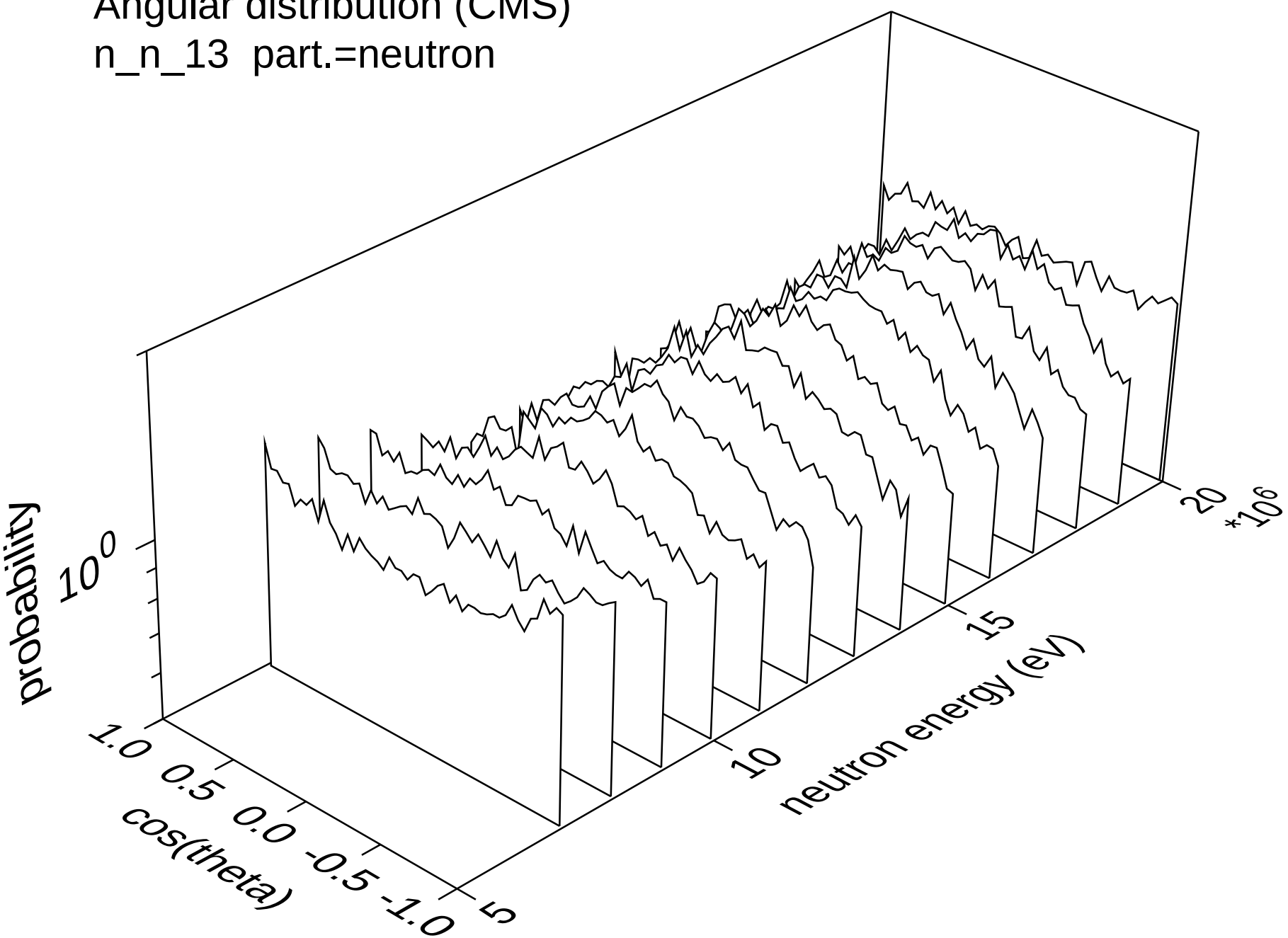

Angular distribution (CMS)
n_n_10 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

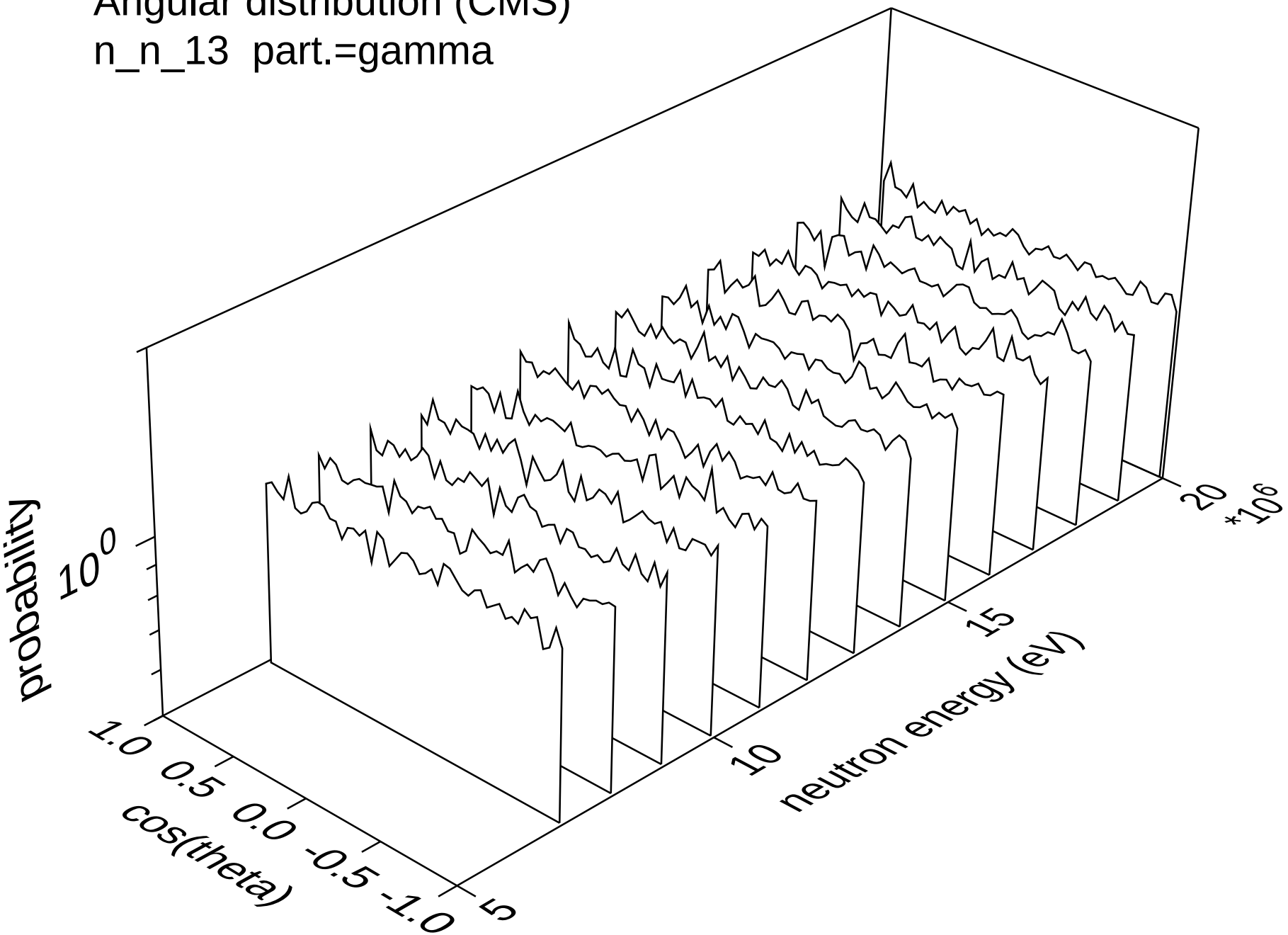

Angular distribution (CMS)
n_n_11 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

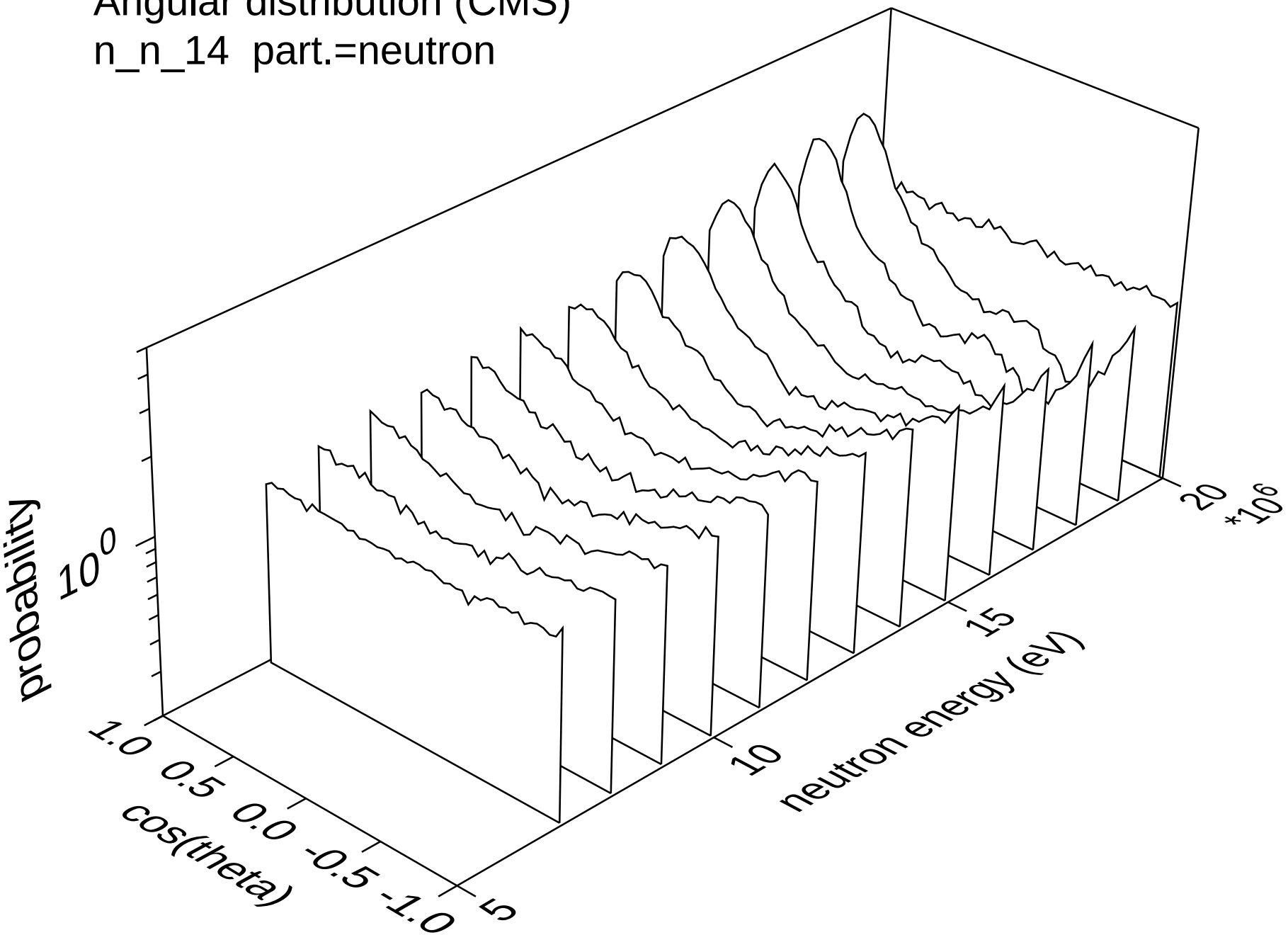

Angular distribution (CMS)
n_n_11 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

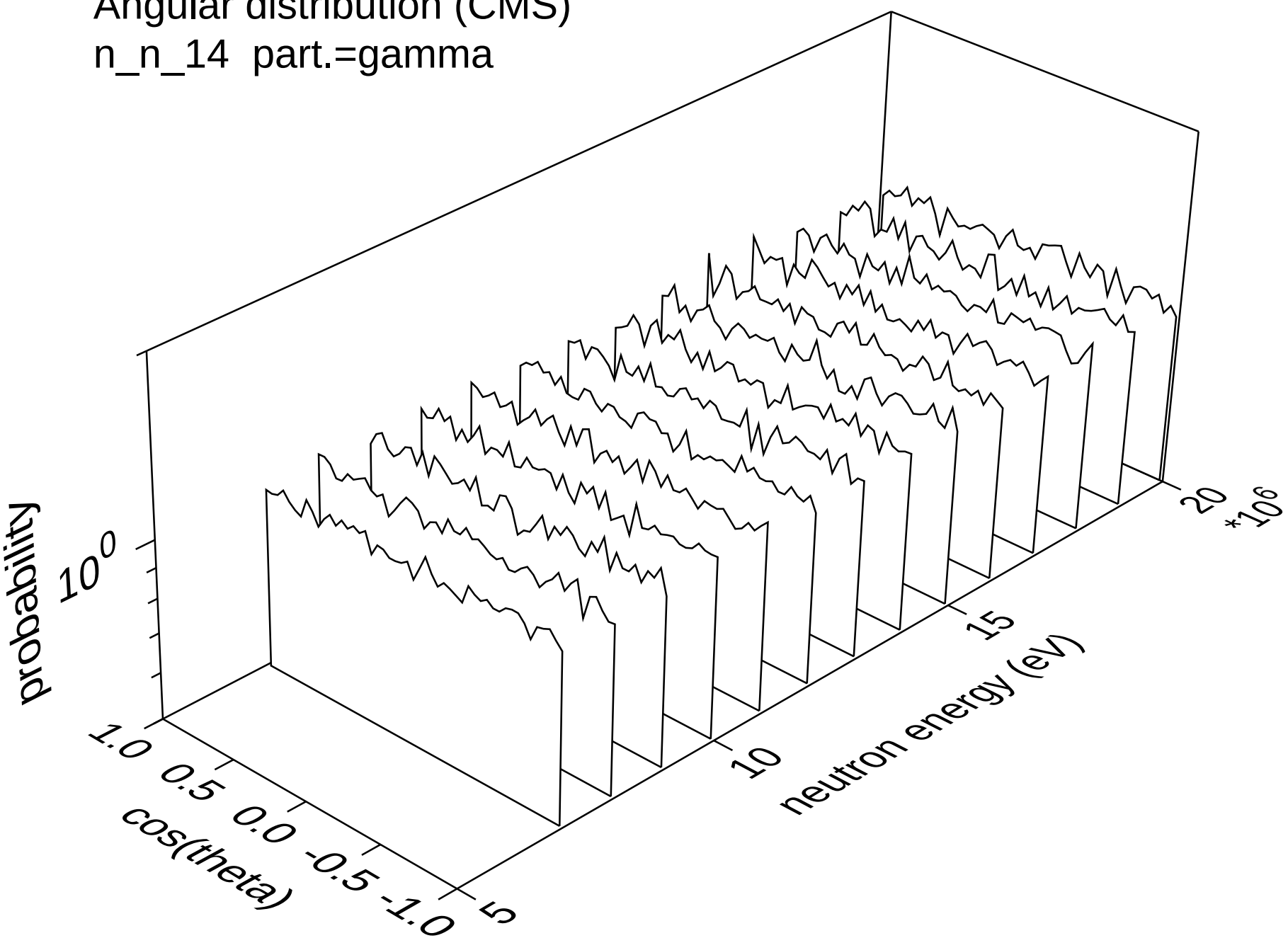

Angular distribution (CMS)
n_n_12 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10⁶
neutron energy (eV)

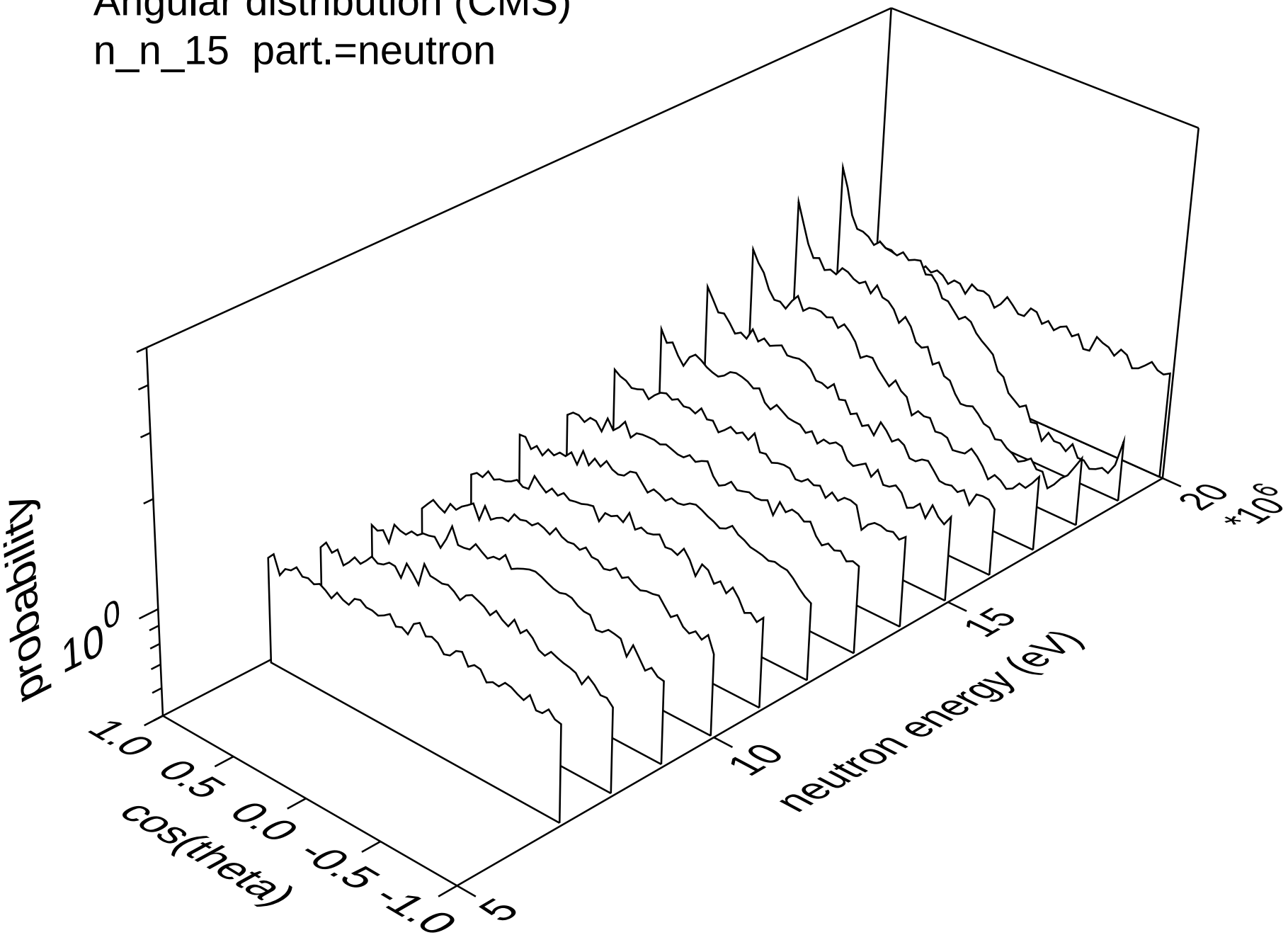

Angular distribution (CMS)
n_n_12 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

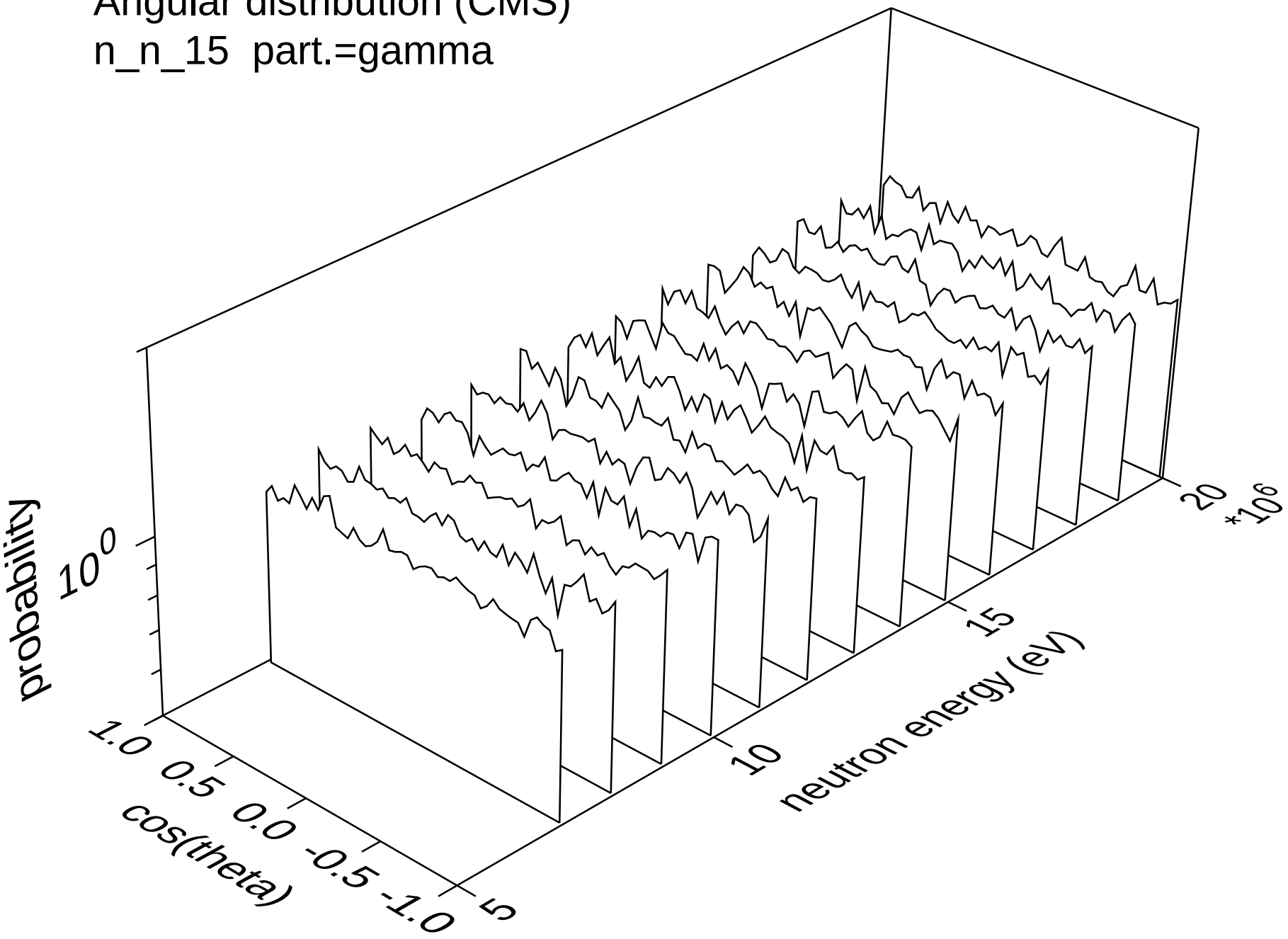

Angular distribution (CMS)
n_n_13 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

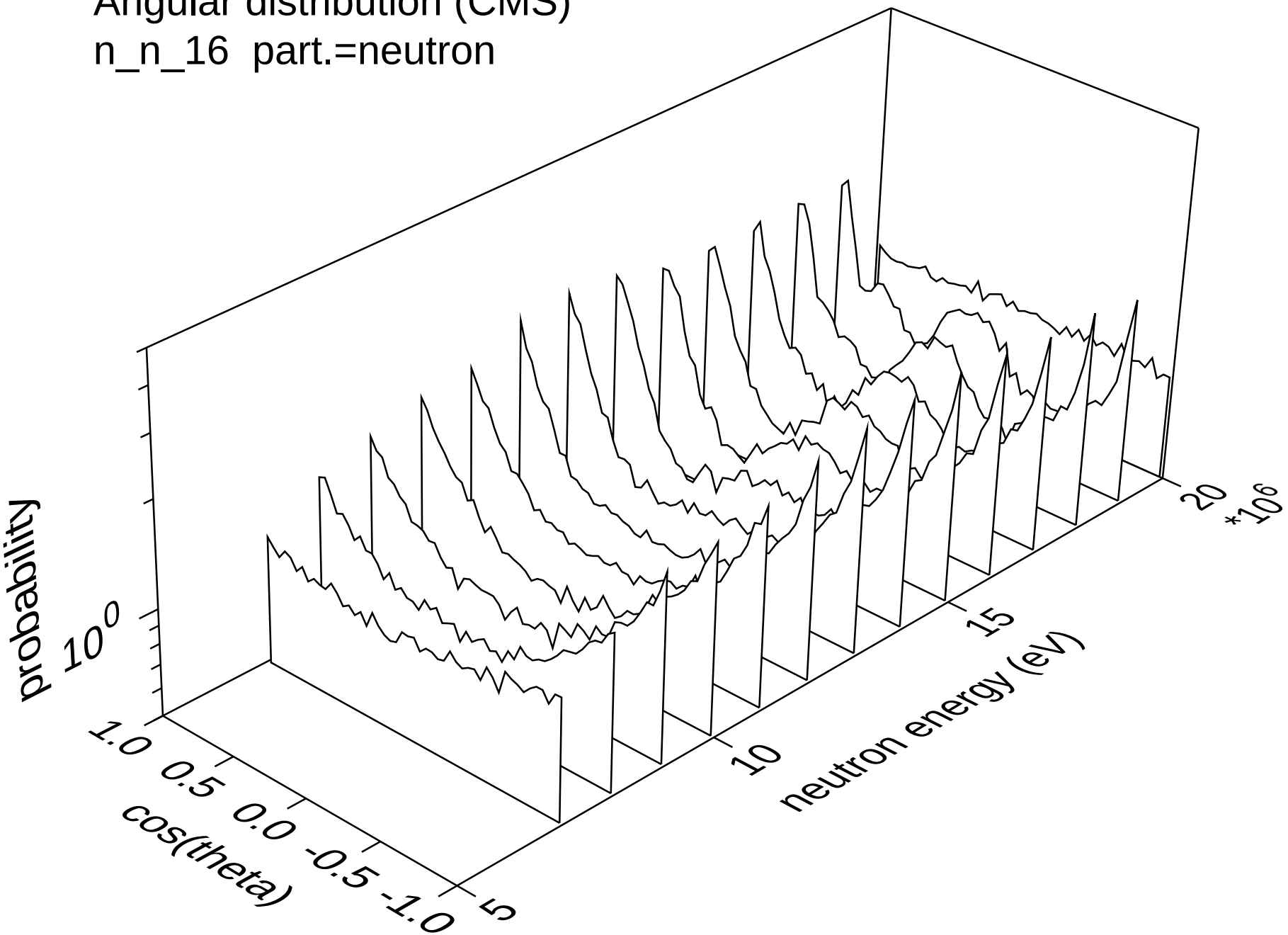

Angular distribution (CMS)
n_n_13 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

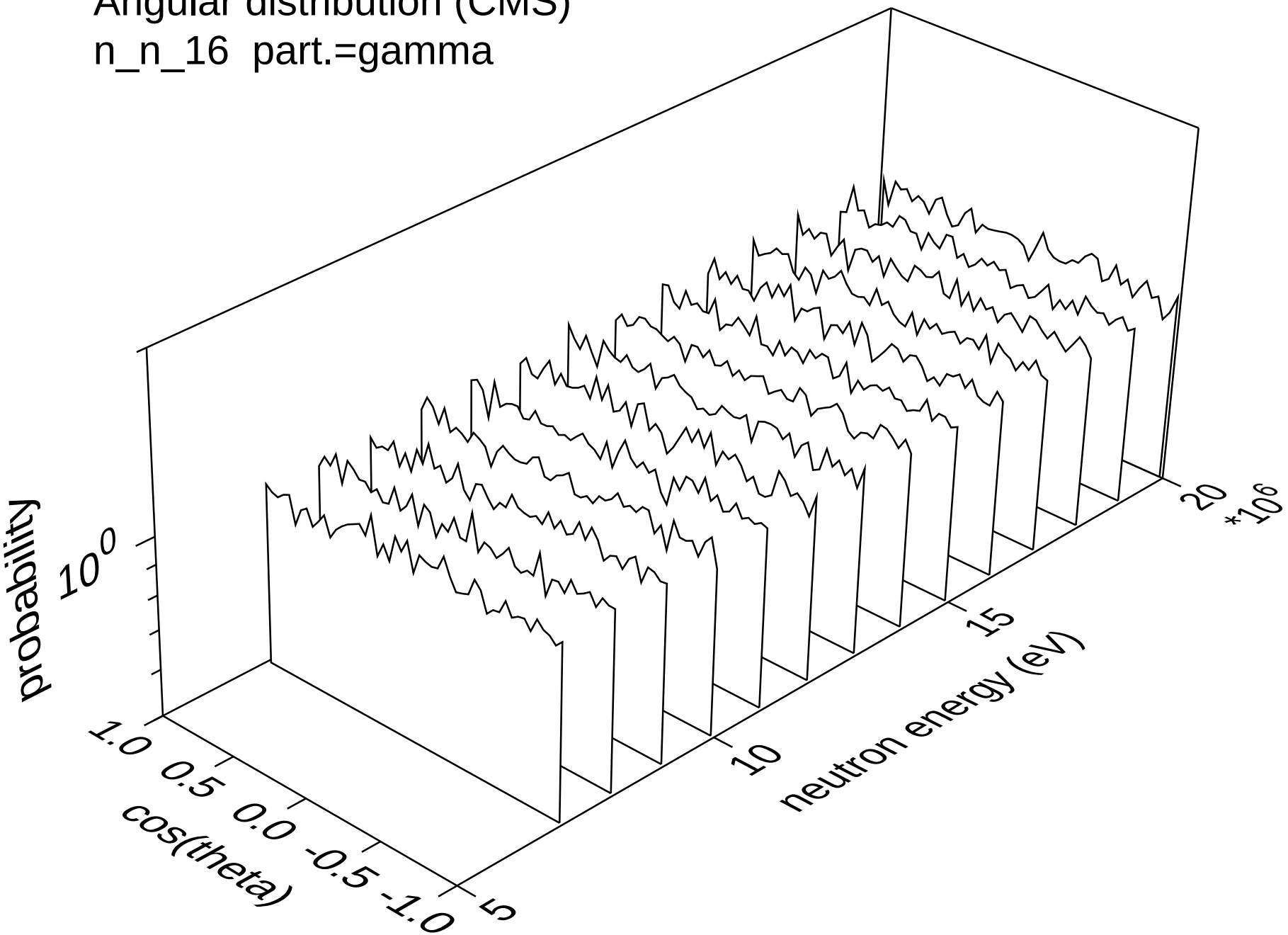

Angular distribution (CMS)
n_n_14 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

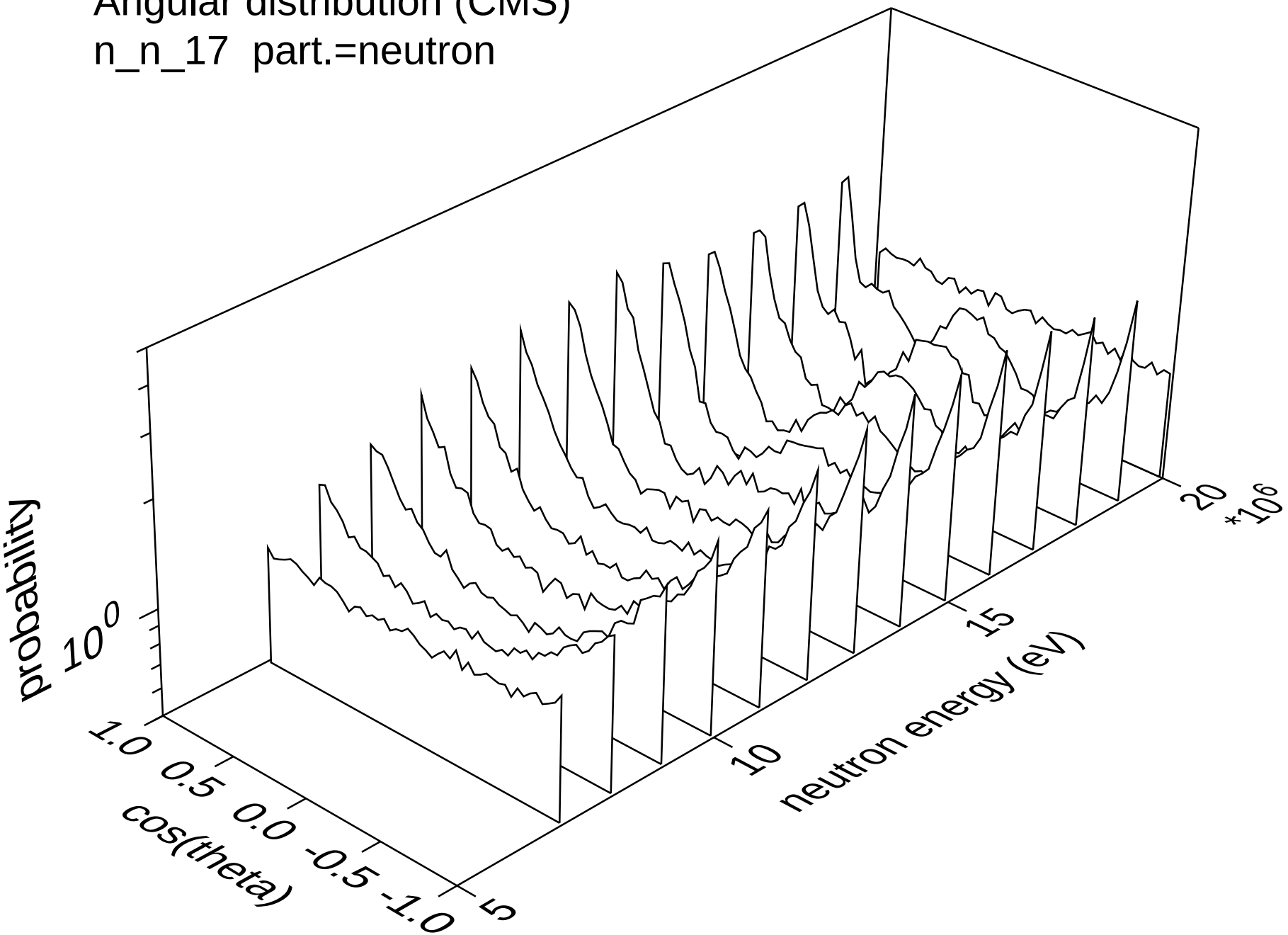

Angular distribution (CMS)
n_n_14 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

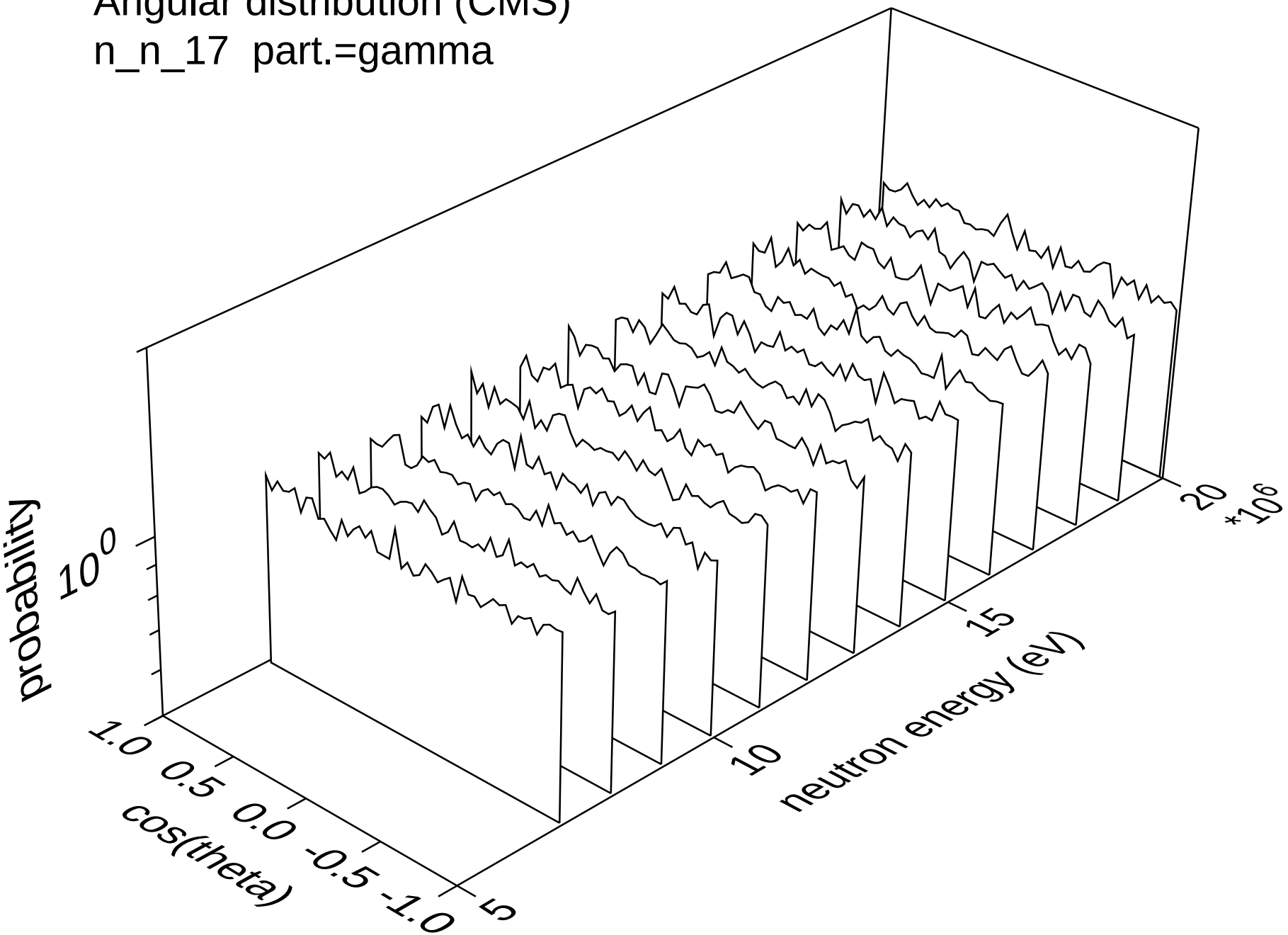

Angular distribution (CMS)
n_n_15 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

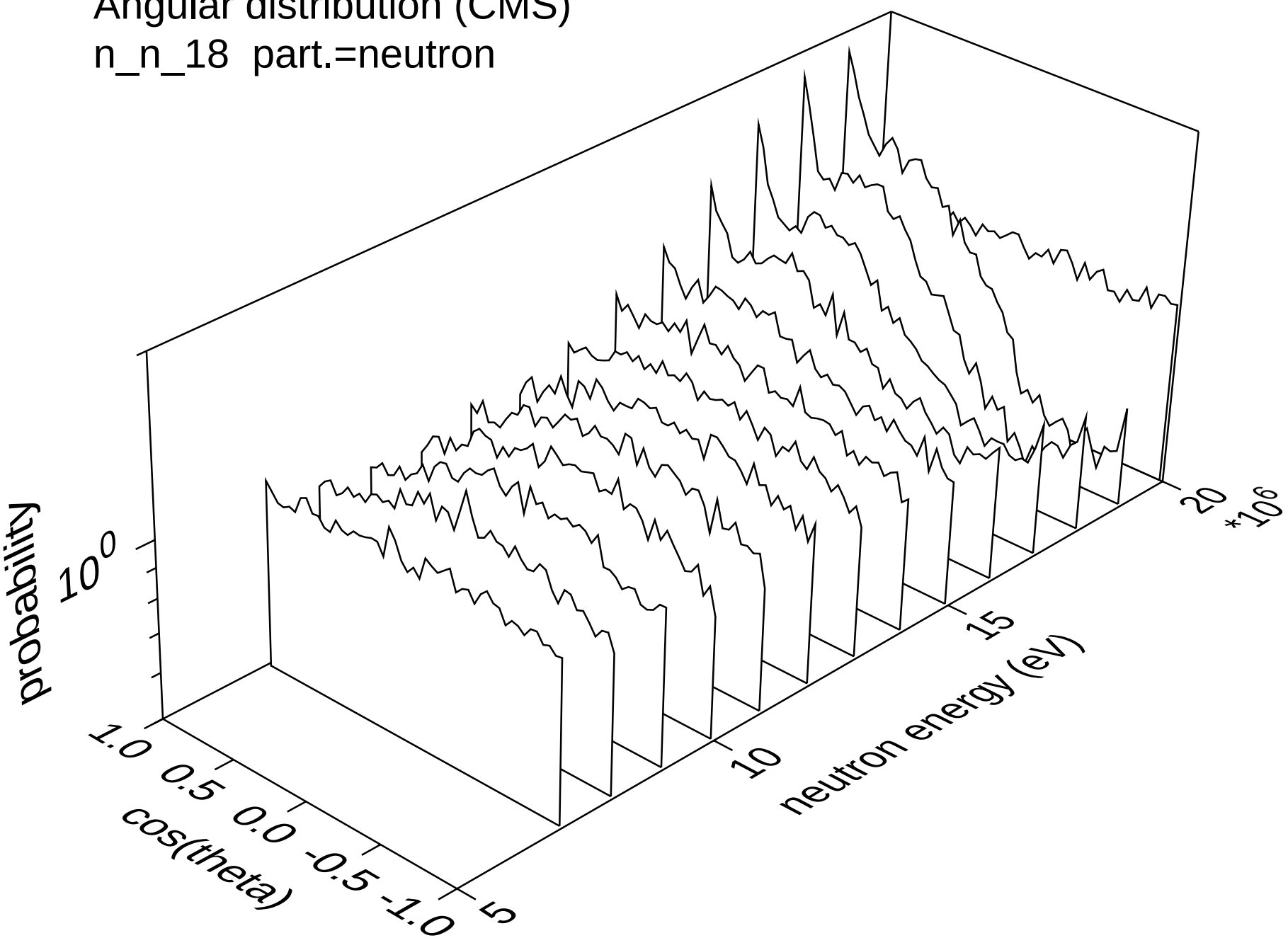

Angular distribution (CMS)
n_n_15 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

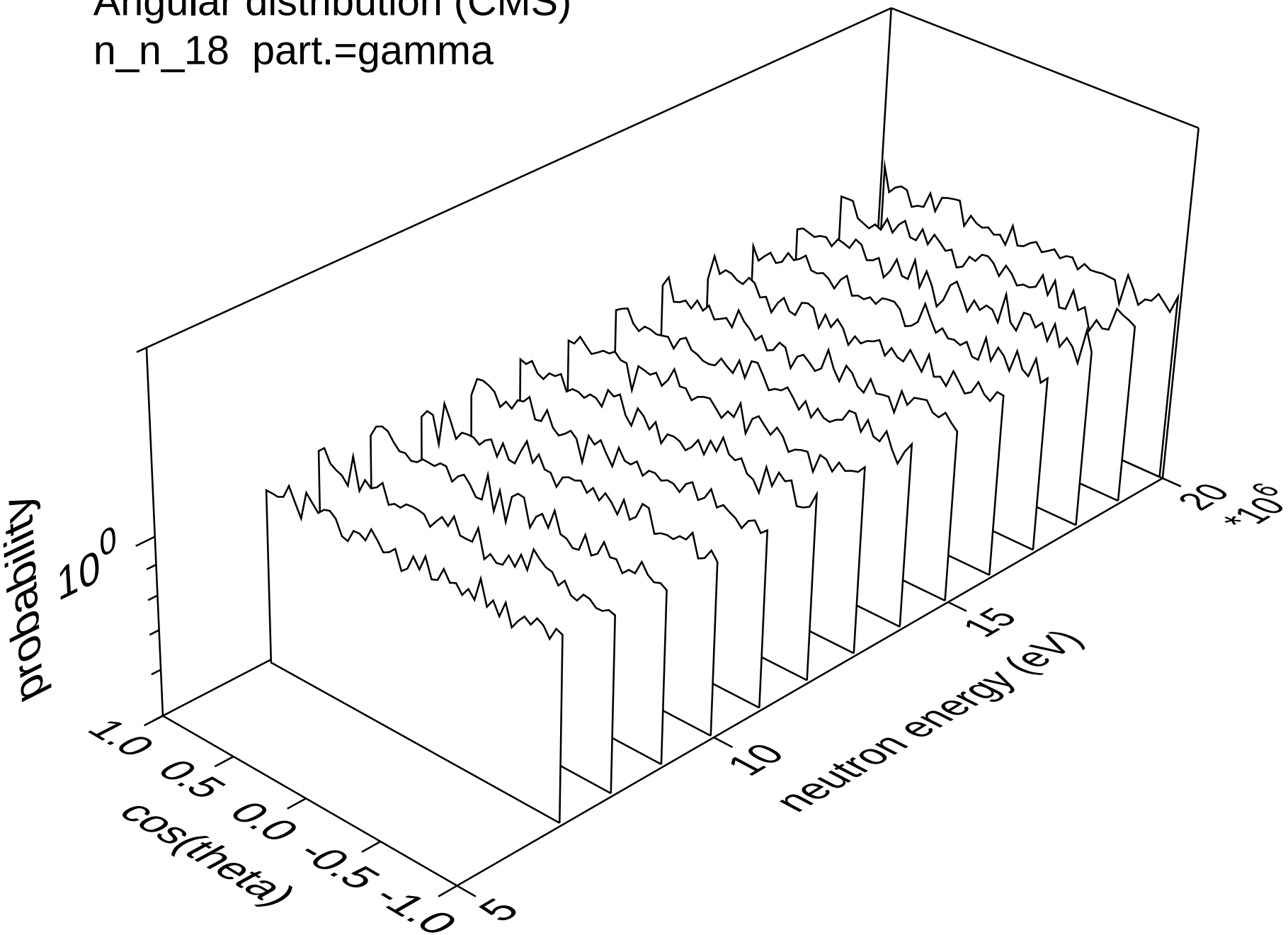

Angular distribution (CMS)
n_n_16 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

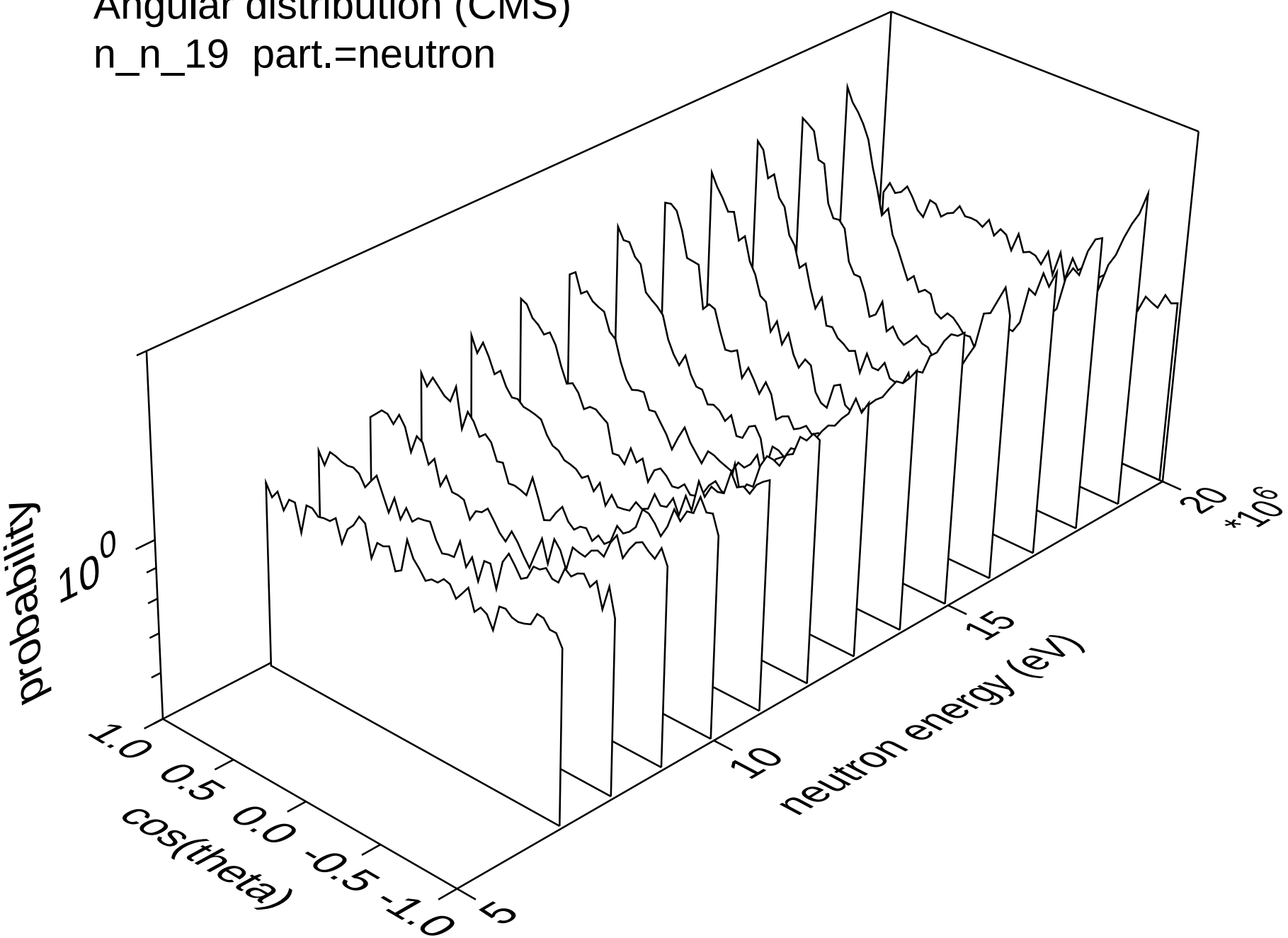

Angular distribution (CMS)
n_n_16 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

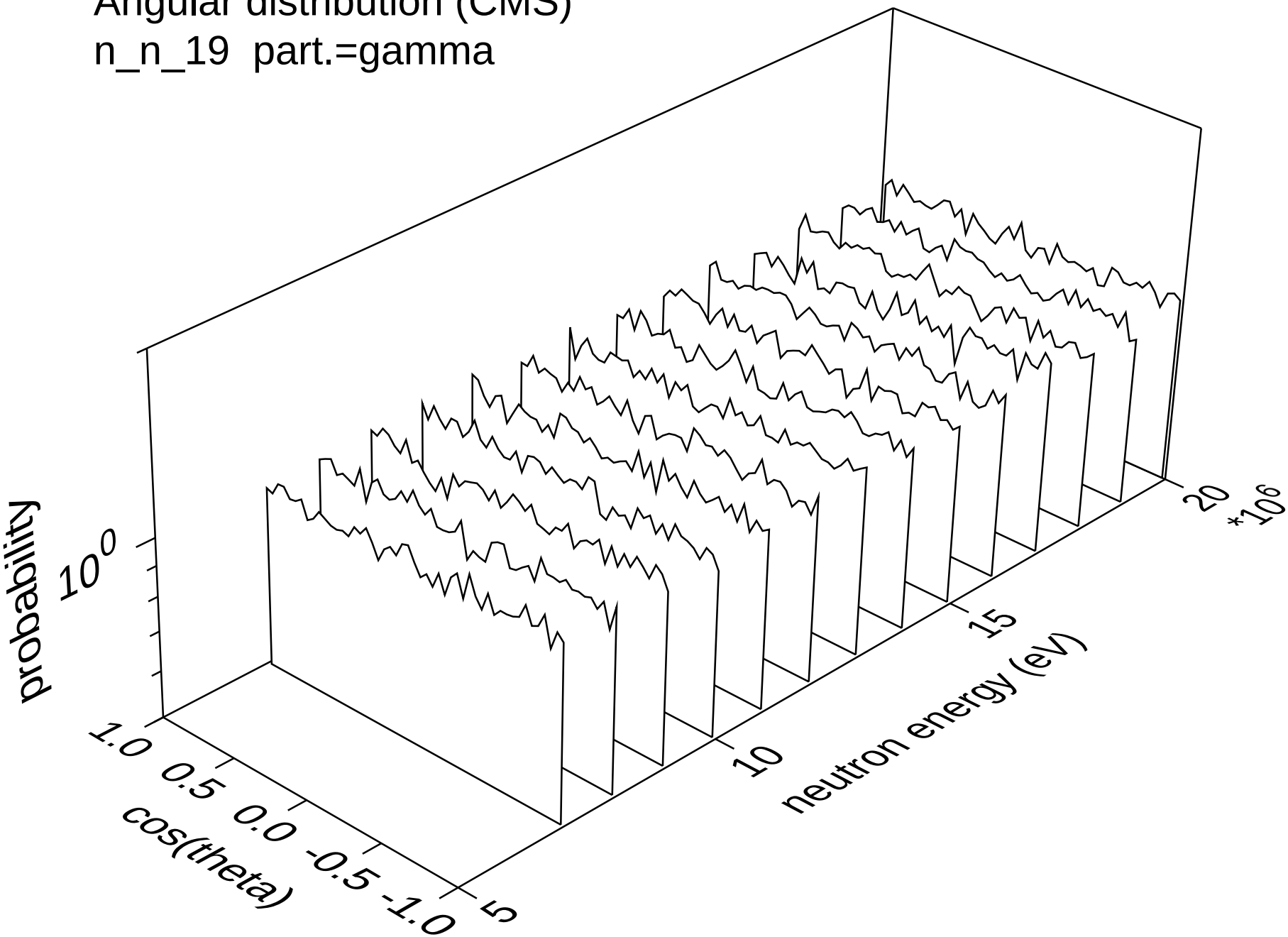

Angular distribution (CMS)
n_n_17 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

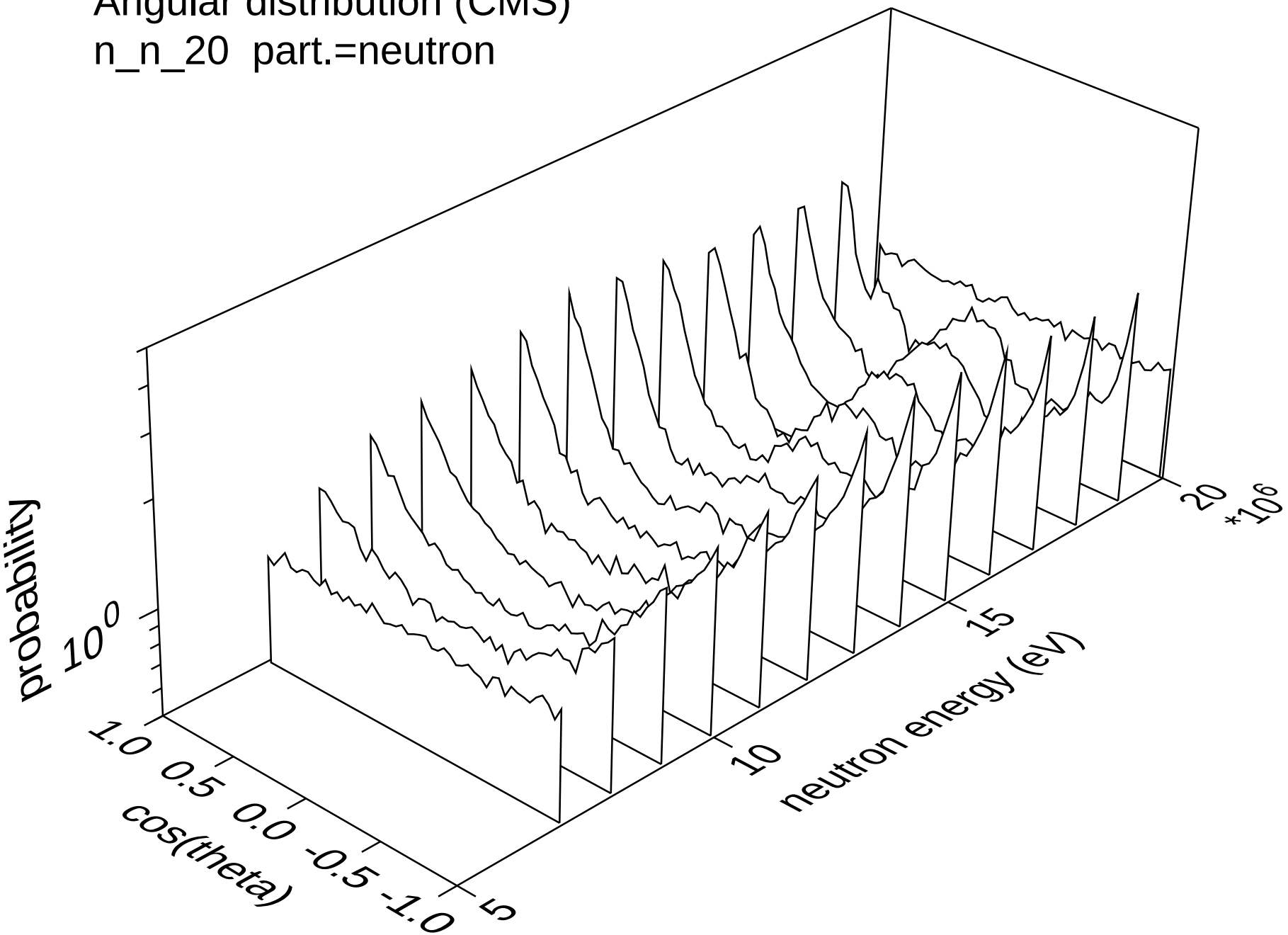

Angular distribution (CMS)
n_n_17 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

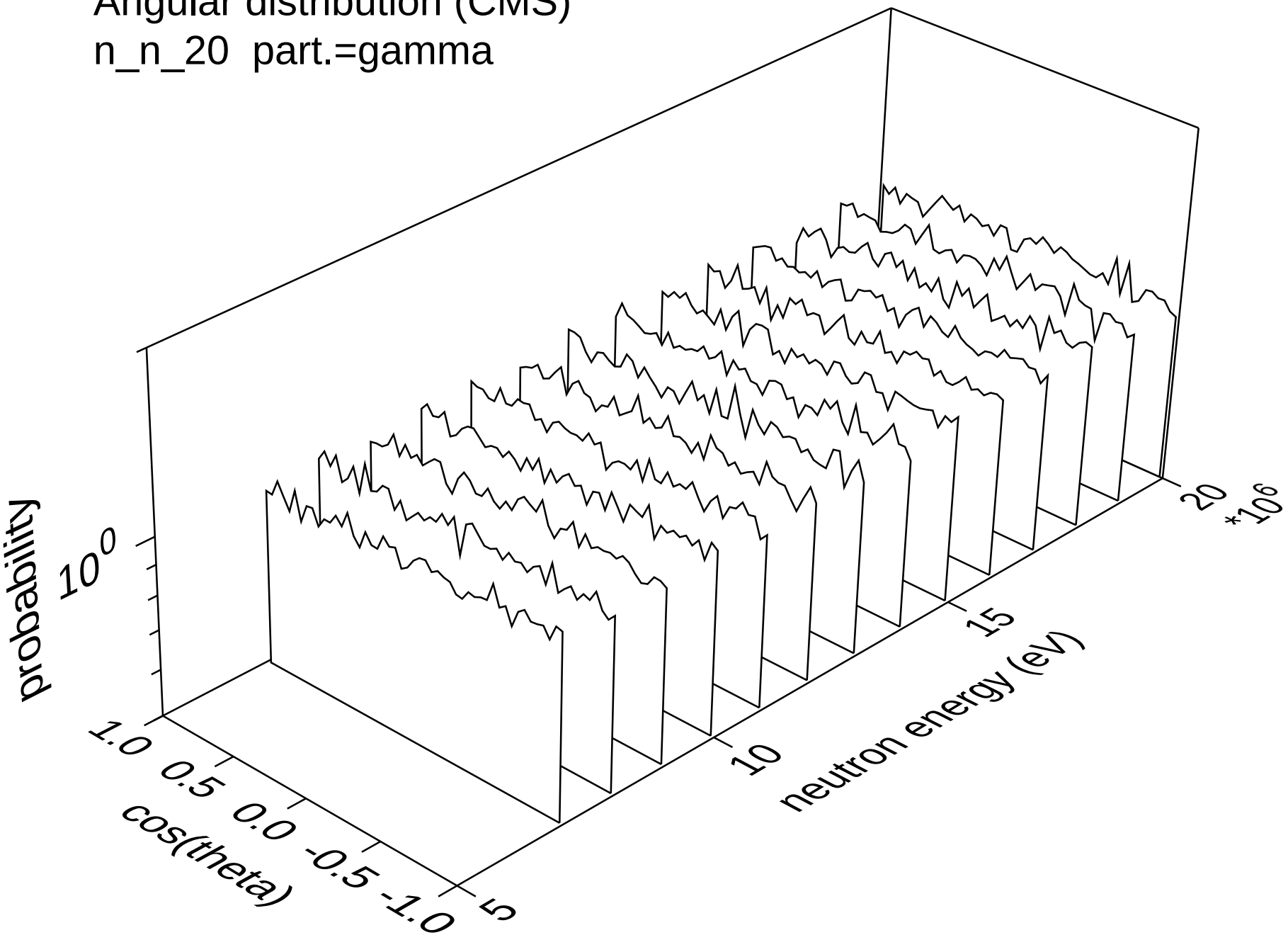

Angular distribution (CMS)
n_n_18 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

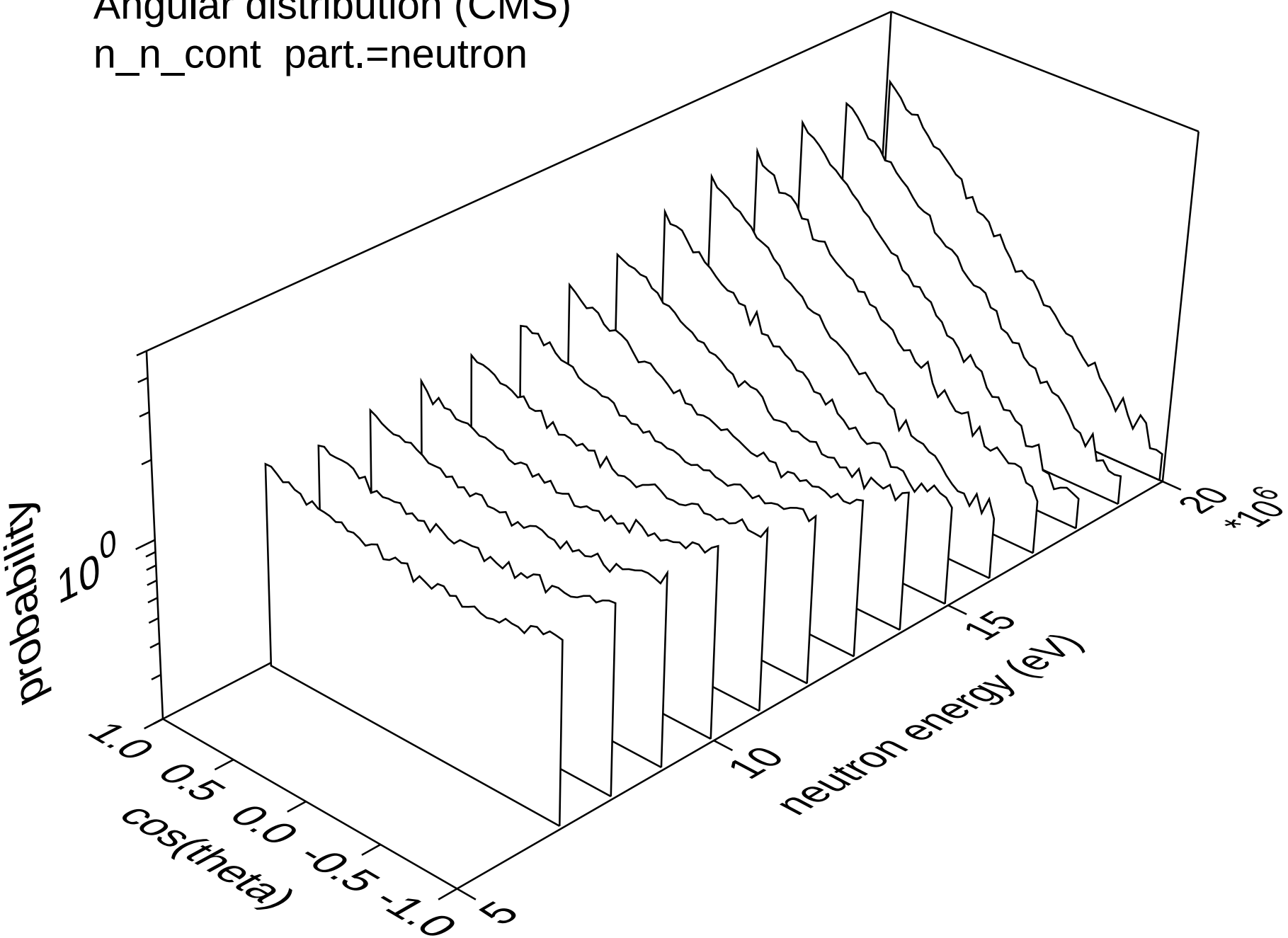

Angular distribution (CMS)
n_n_18 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

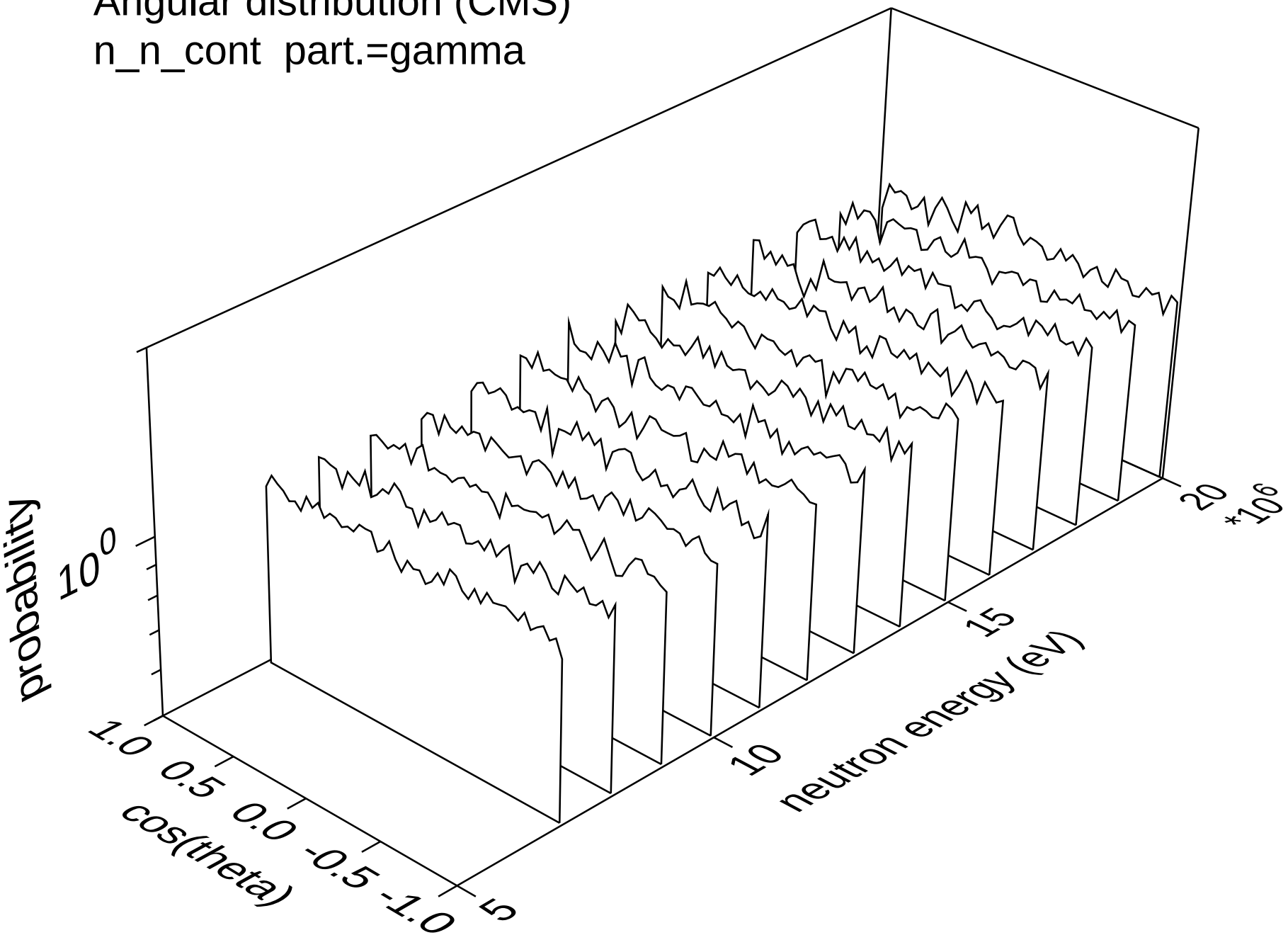

Angular distribution (CMS)
n_n_19 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

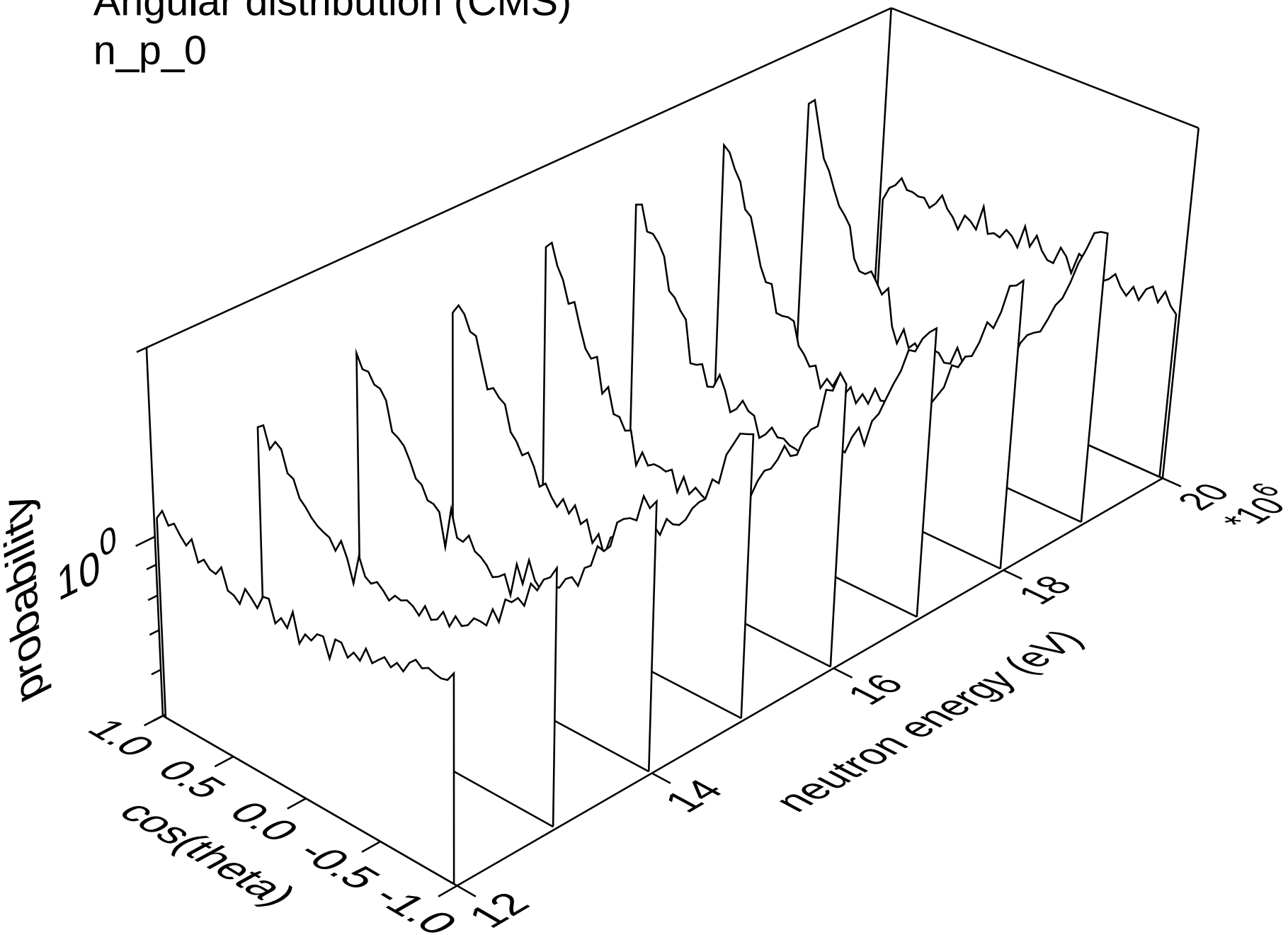

Angular distribution (CMS)
n_n_19 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

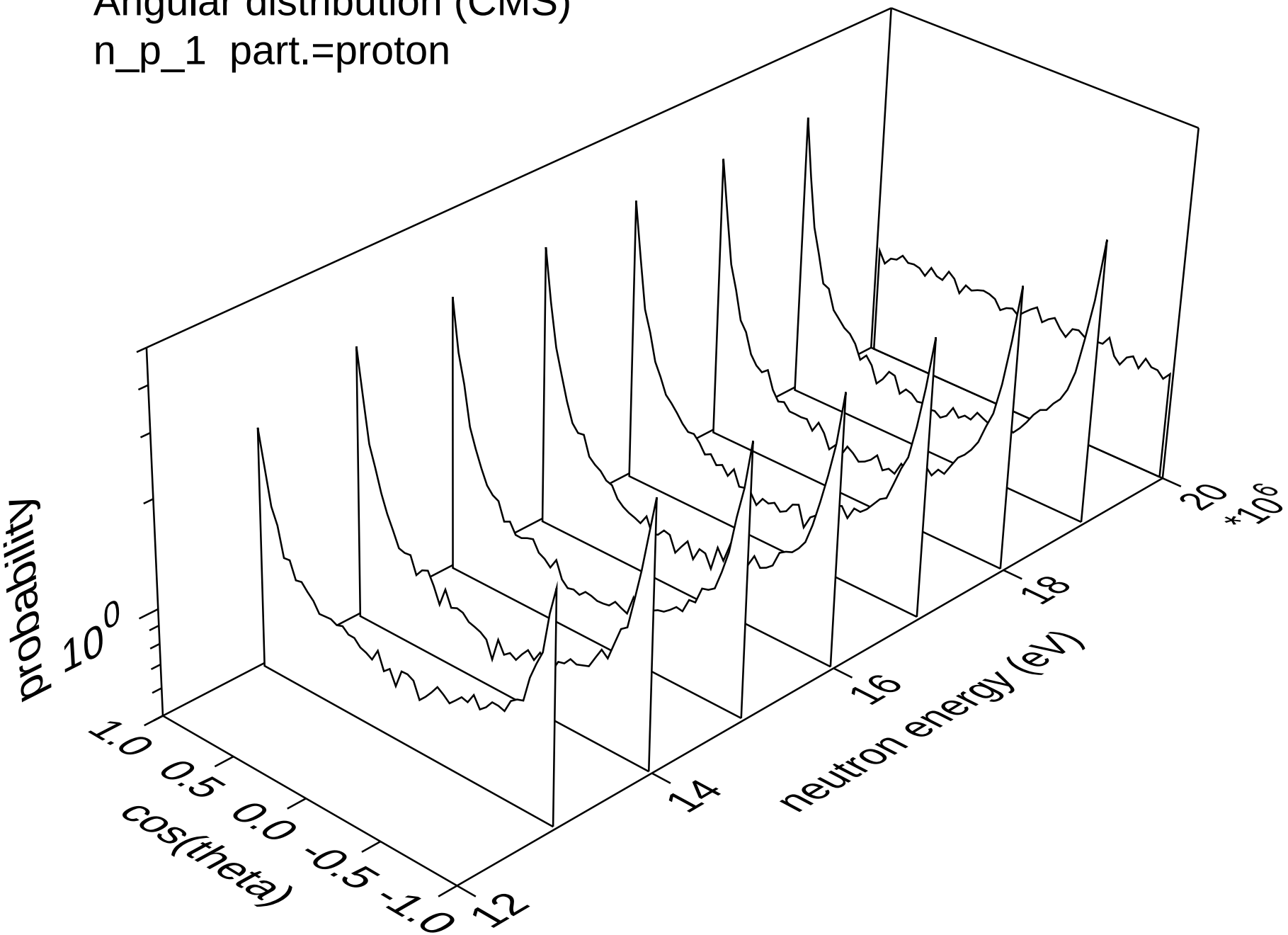

Angular distribution (CMS)
n_n_20 part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

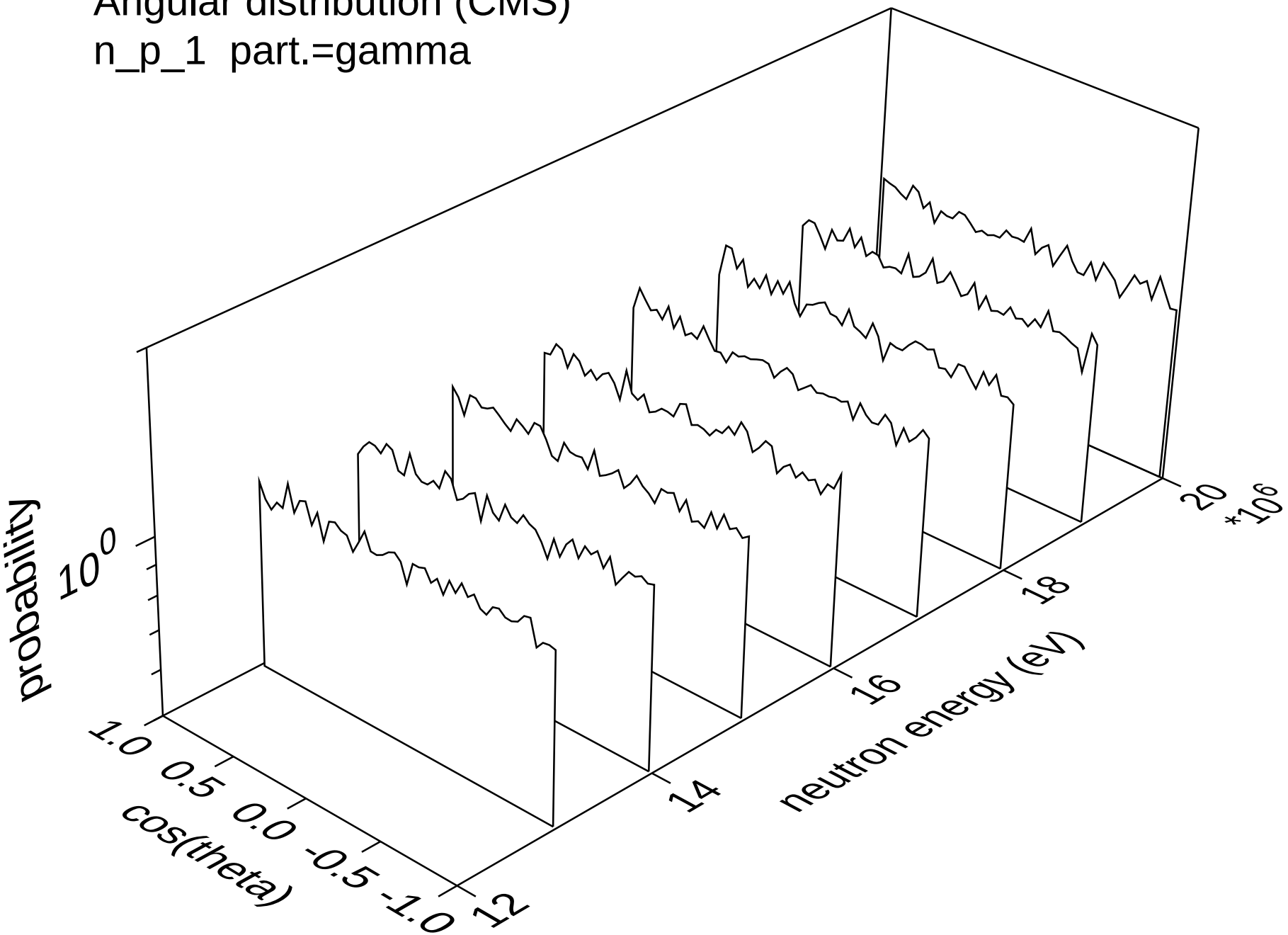

Angular distribution (CMS)
n_n_20 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

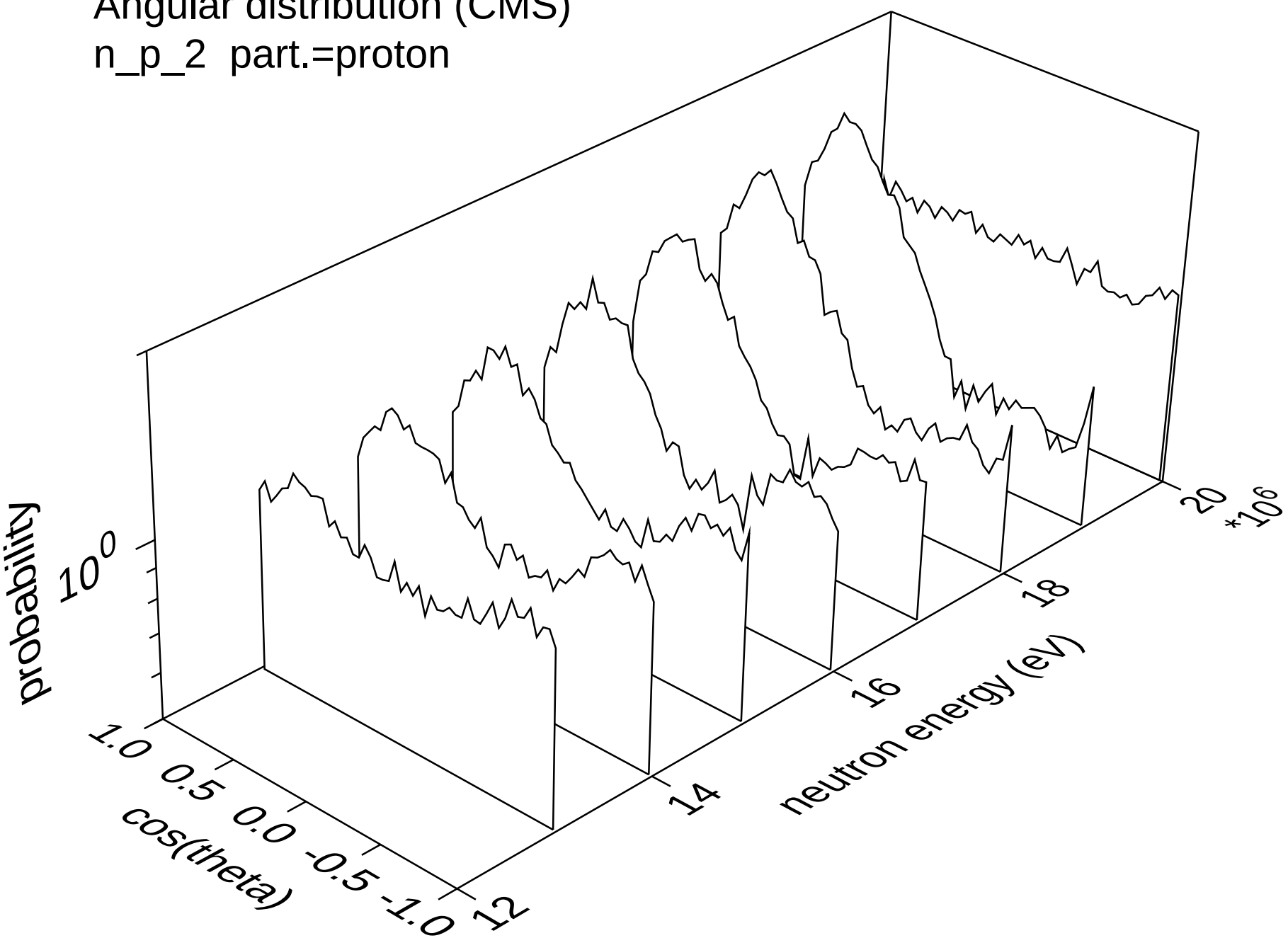

Angular distribution (CMS)
n_n_cont part.=neutron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

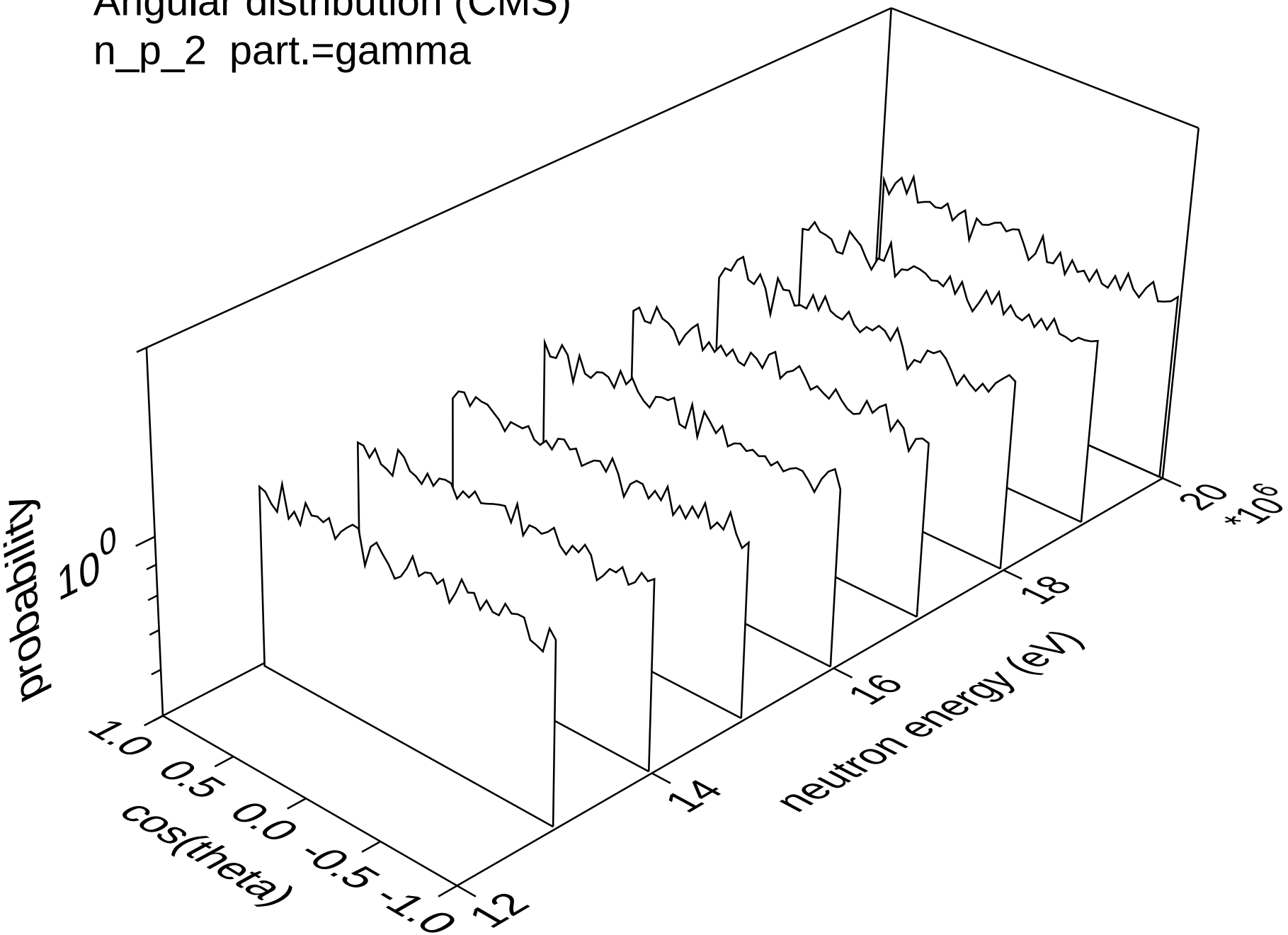

Angular distribution (CMS)
n_n_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
5
10
15
20
*10^6
neutron energy (eV)

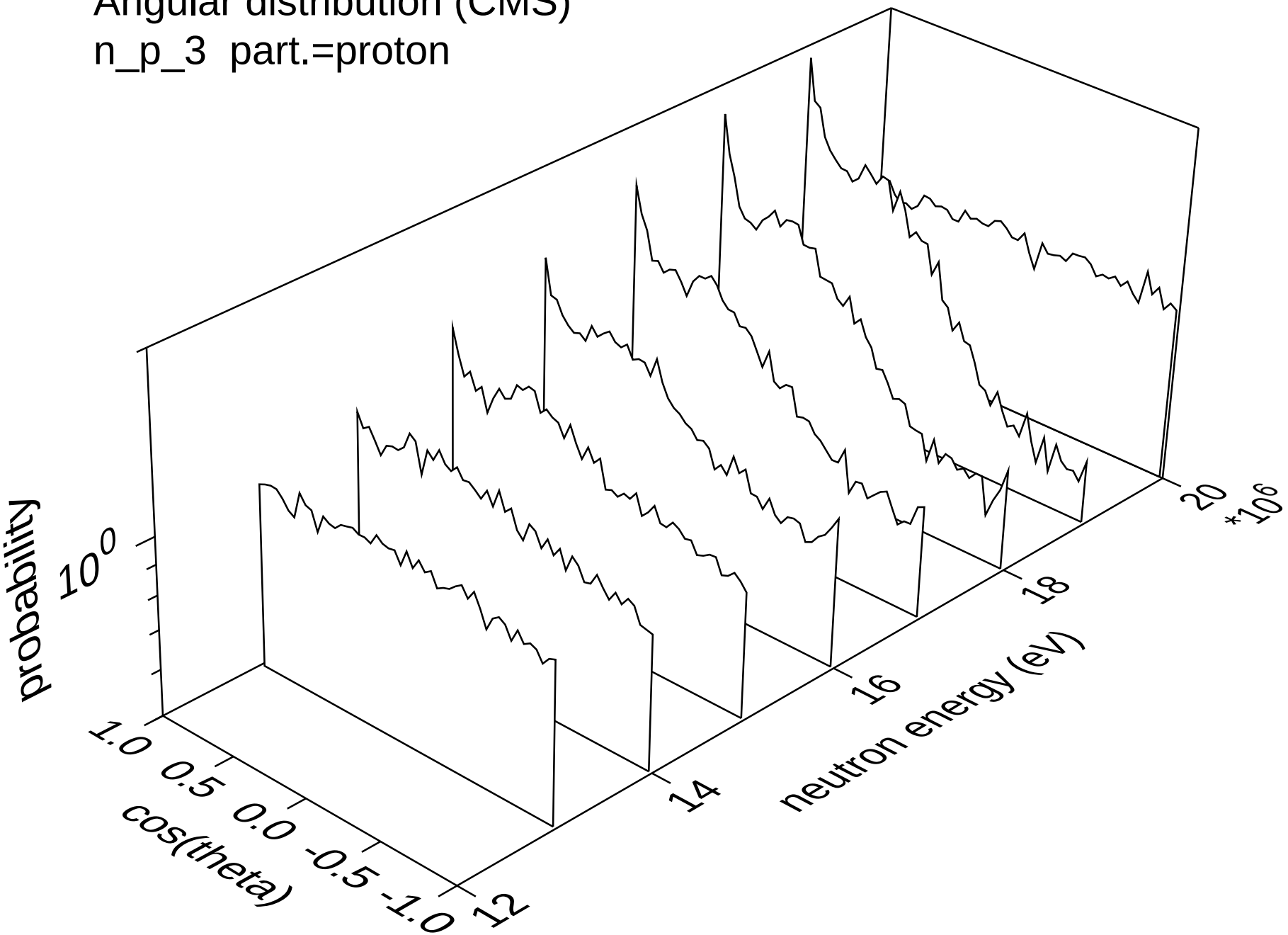

Angular distribution (CMS)
n_p_0
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

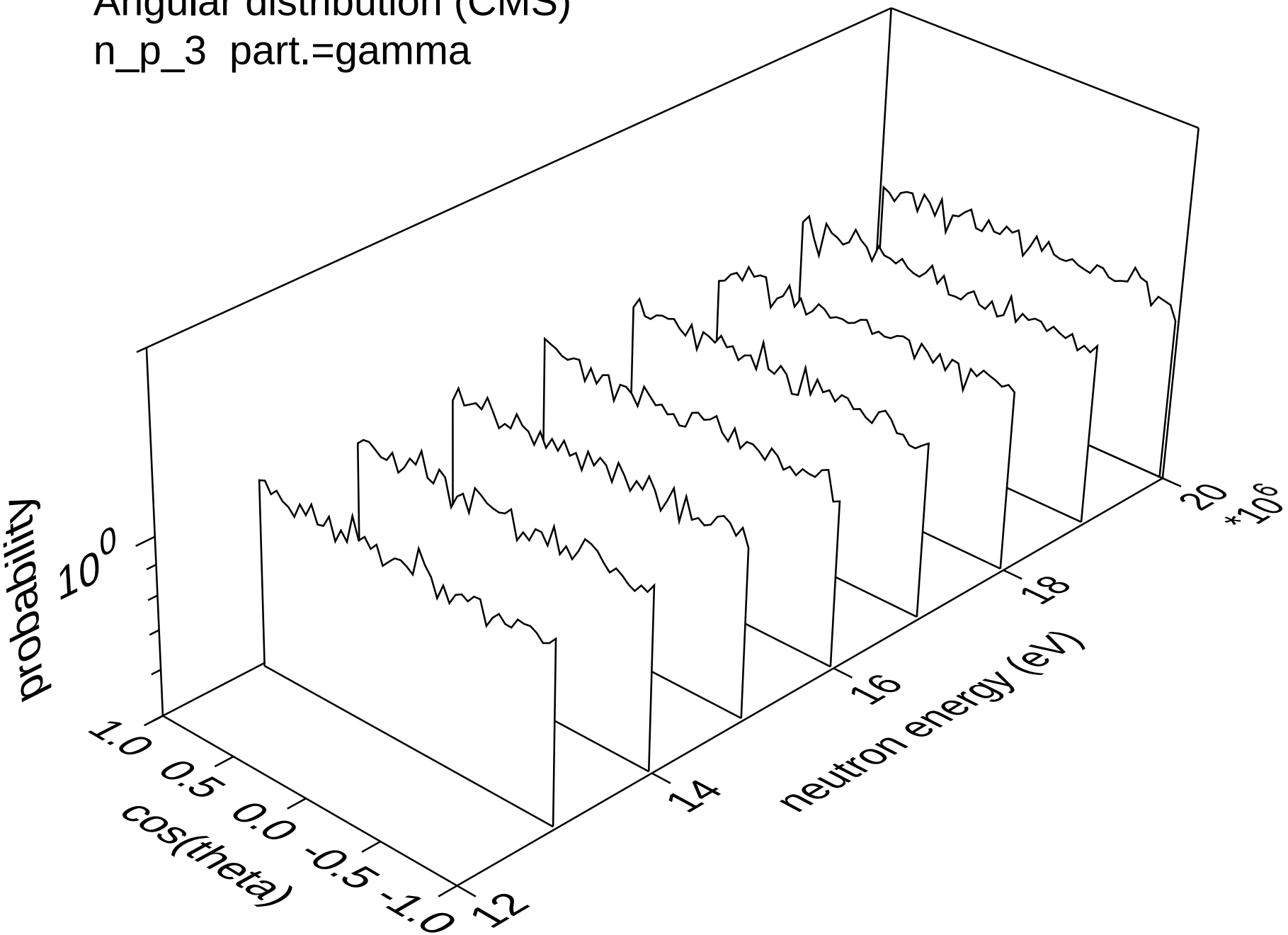

Angular distribution (CMS)
n_p_1 part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

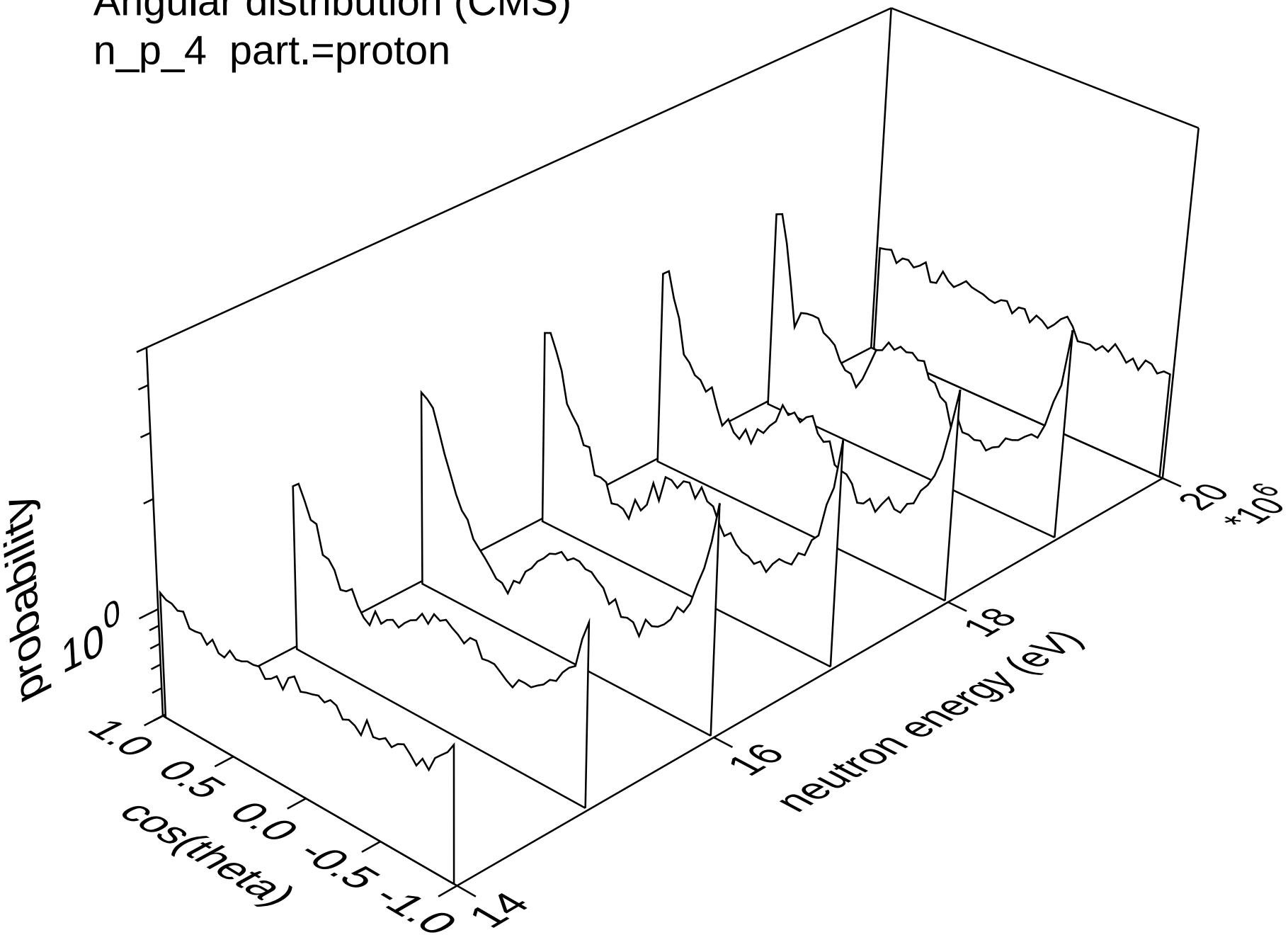

Angular distribution (CMS)
n_p_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

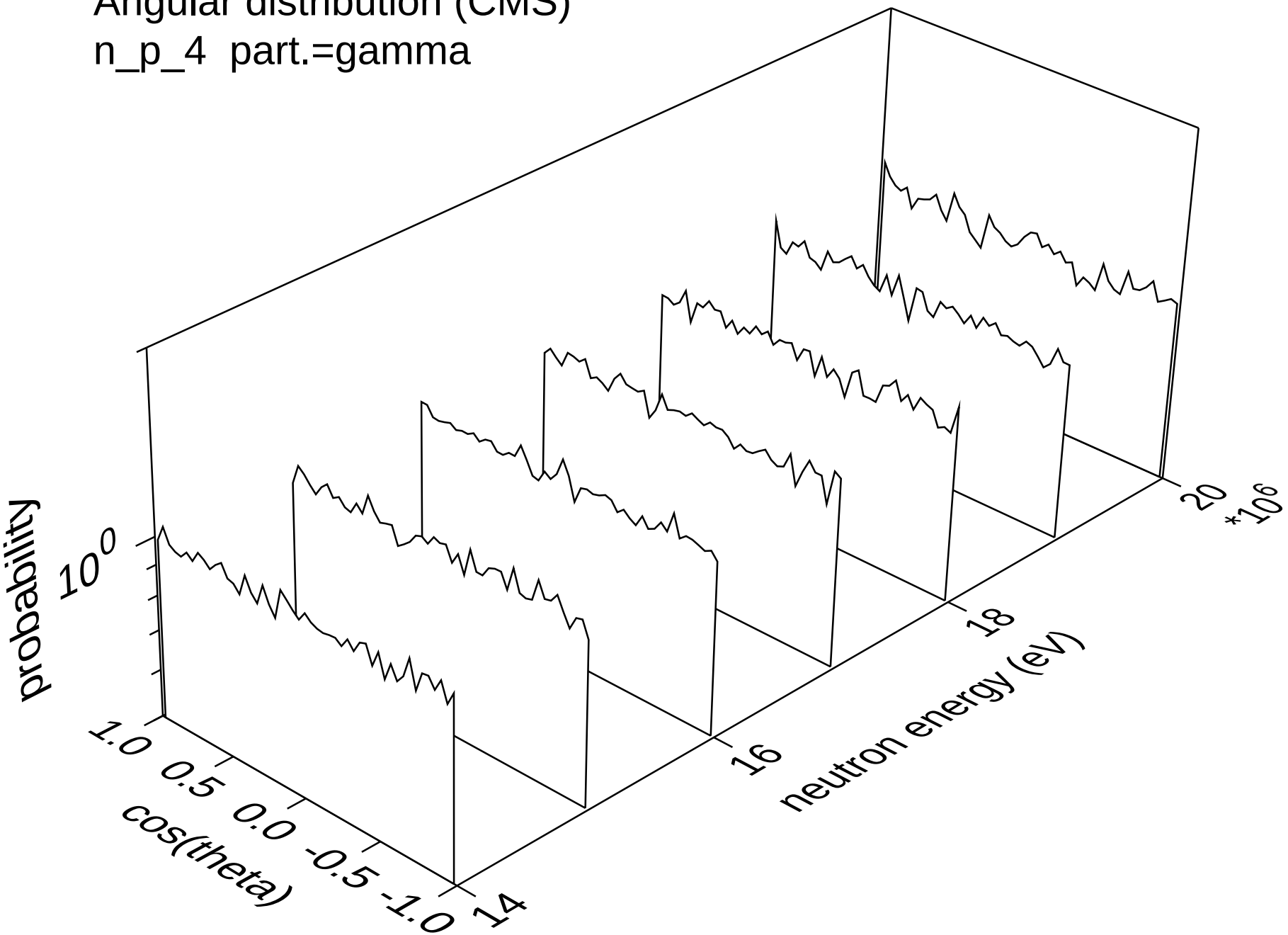

Angular distribution (CMS)
n_p_2 part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

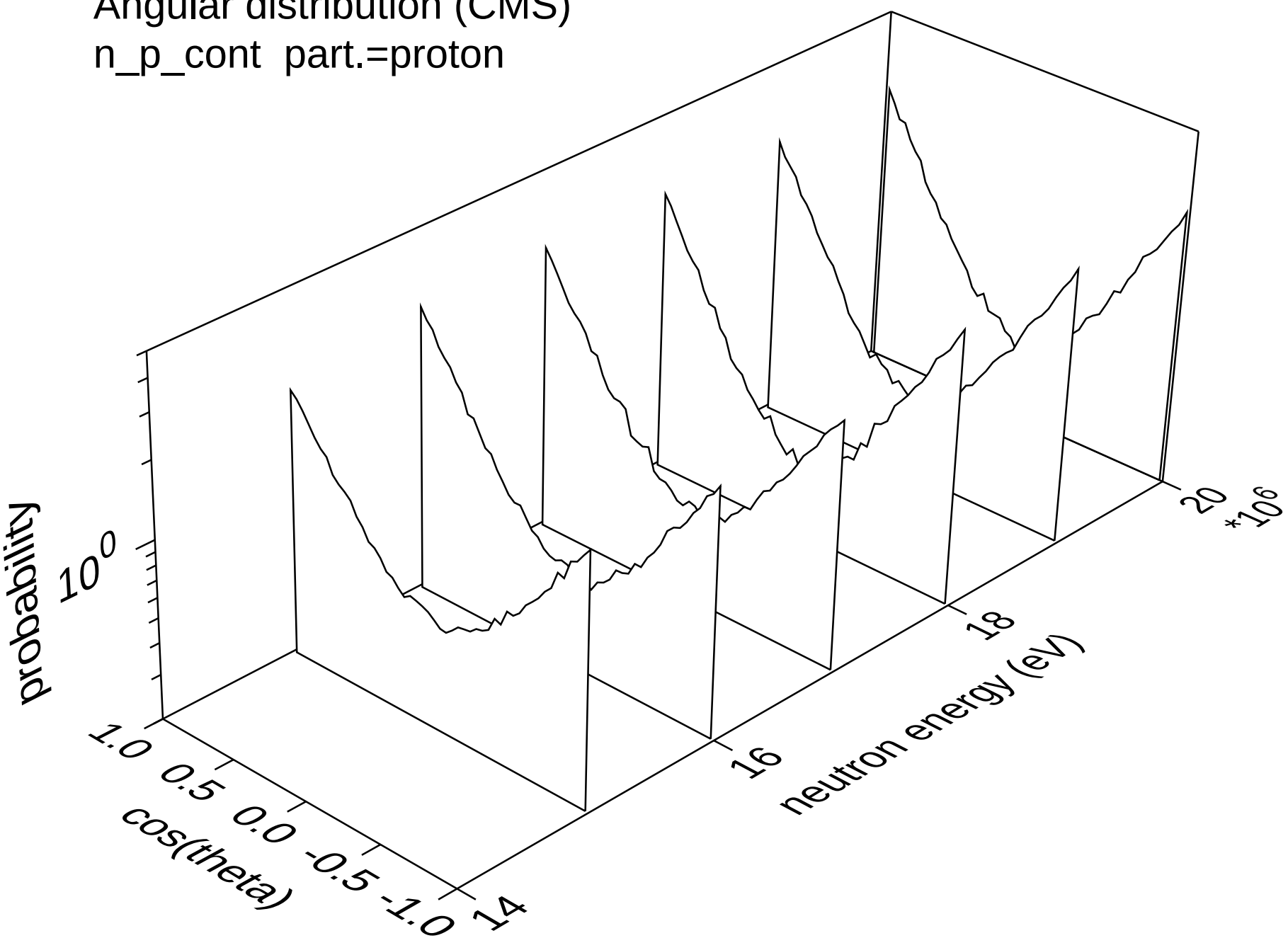

Angular distribution (CMS)
n_p_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

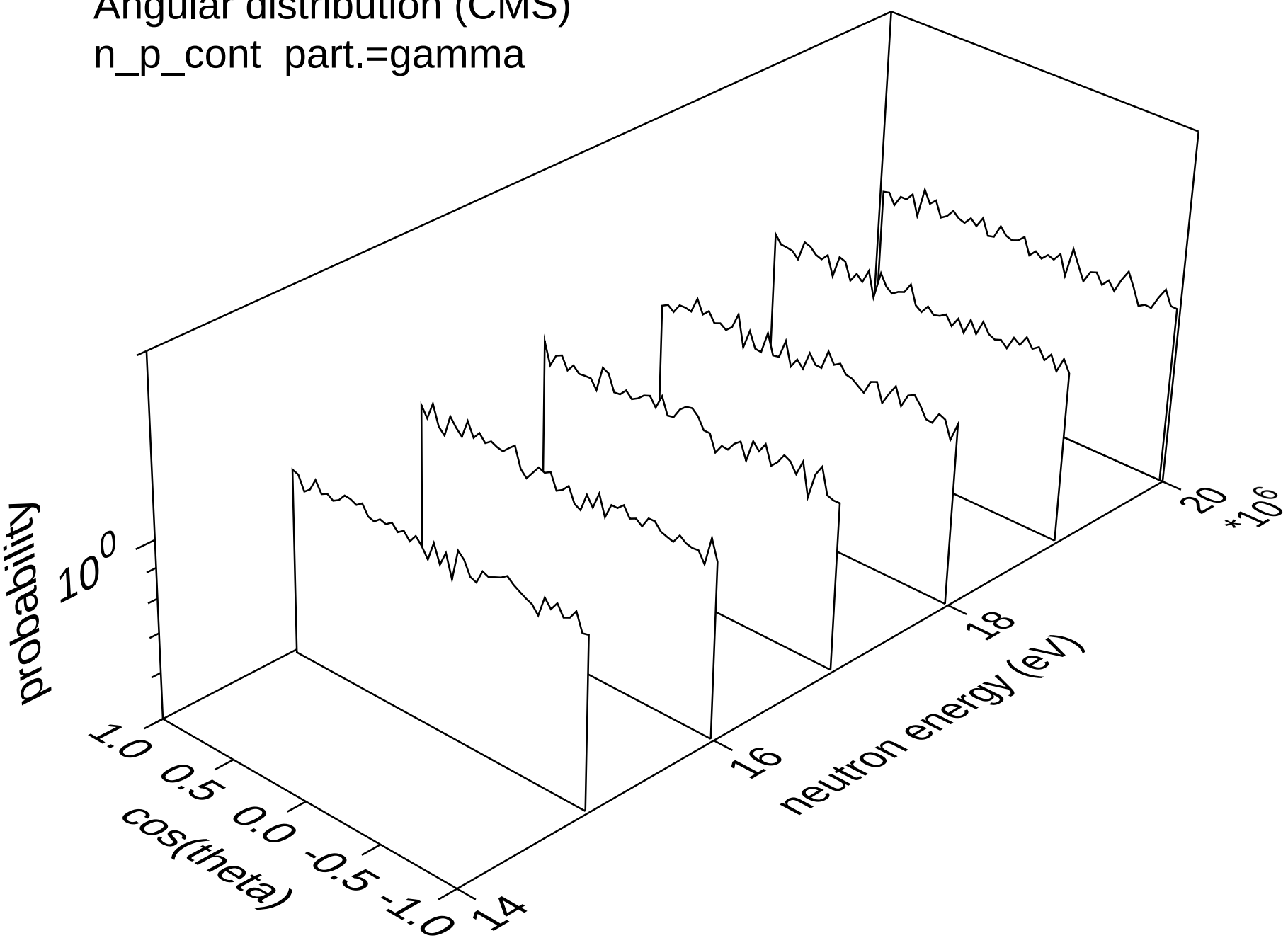

Angular distribution (CMS)
n_p_3 part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

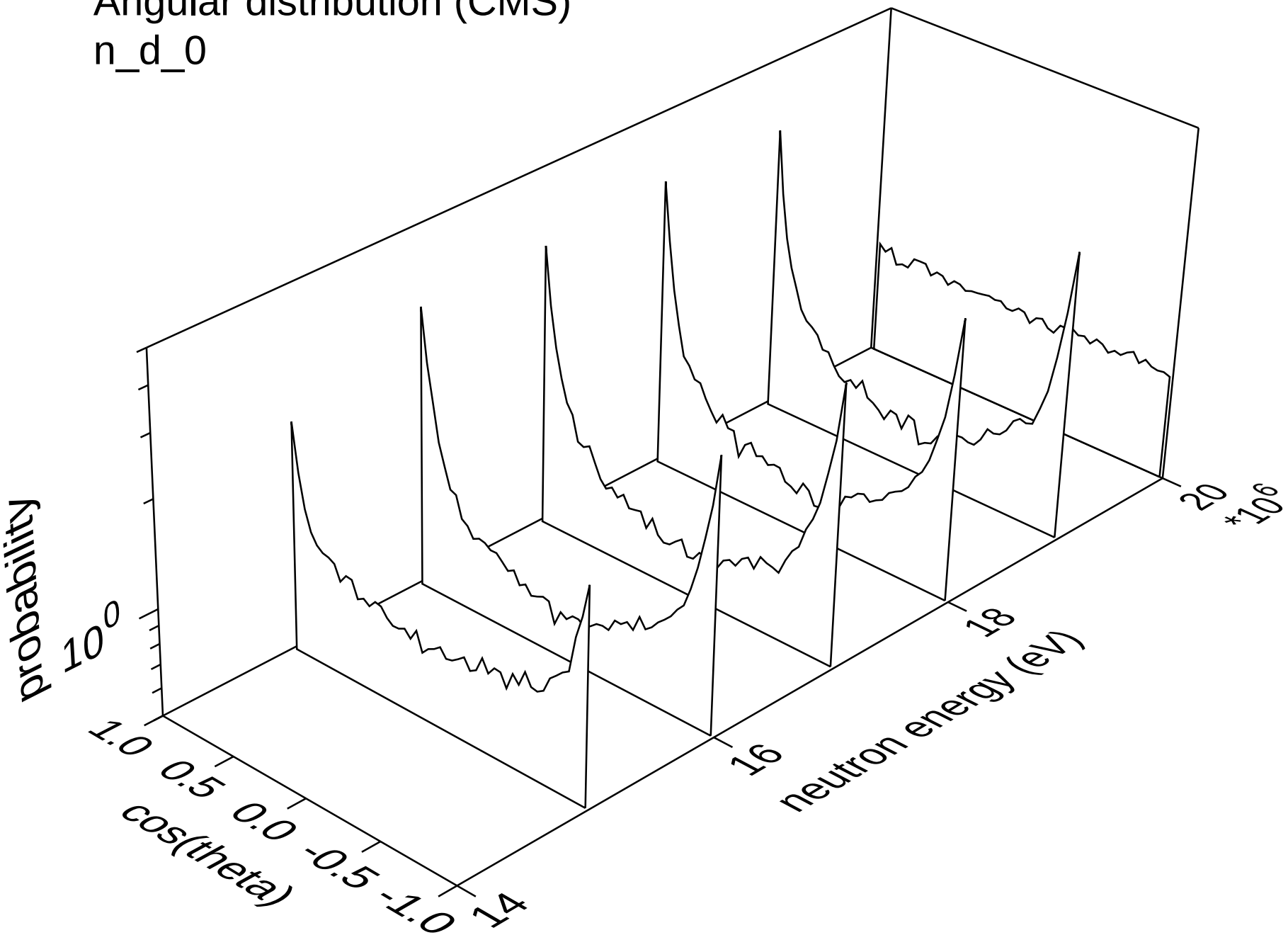

Angular distribution (CMS)
n_p_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

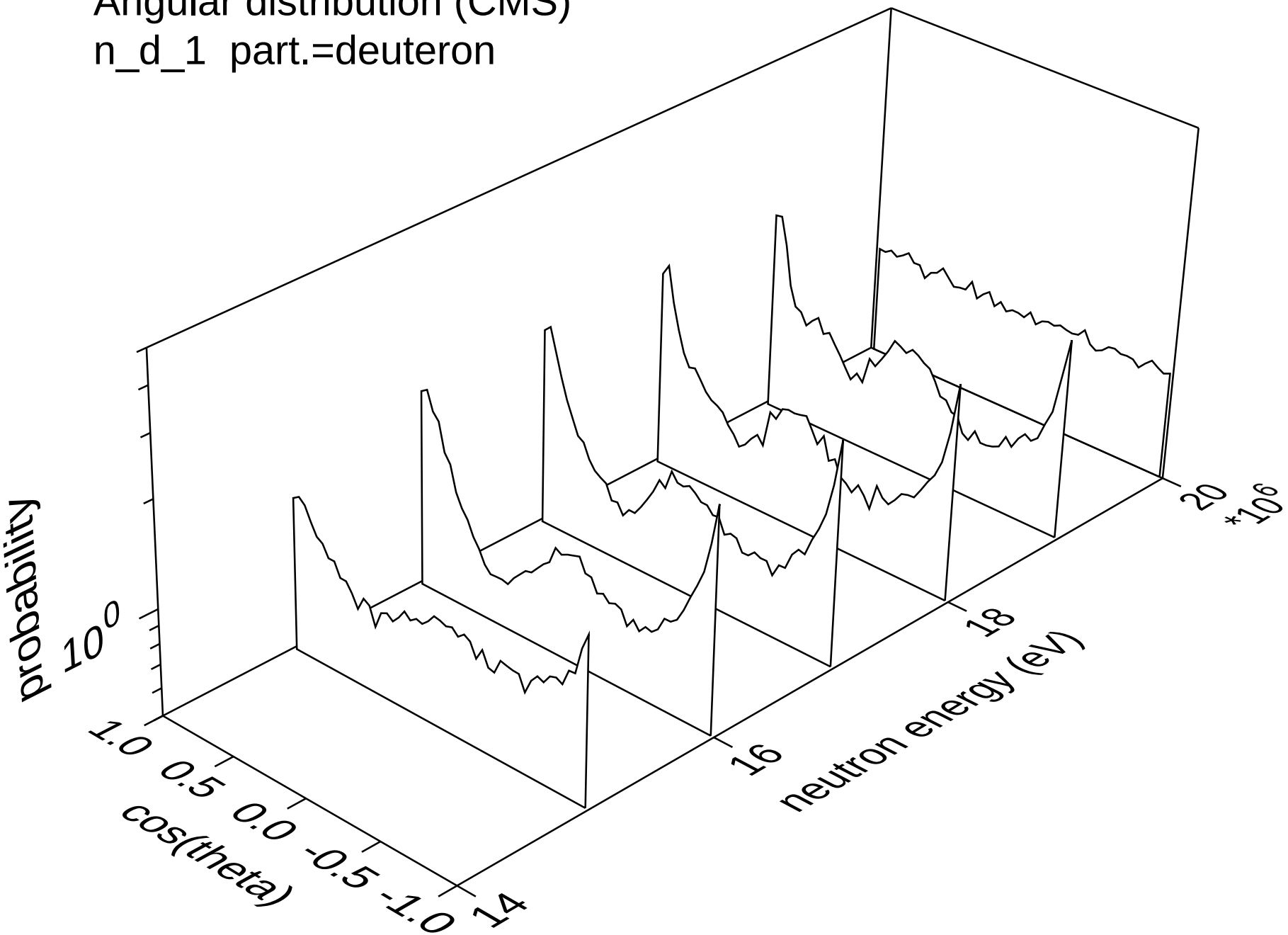

Angular distribution (CMS)
n_p_4 part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

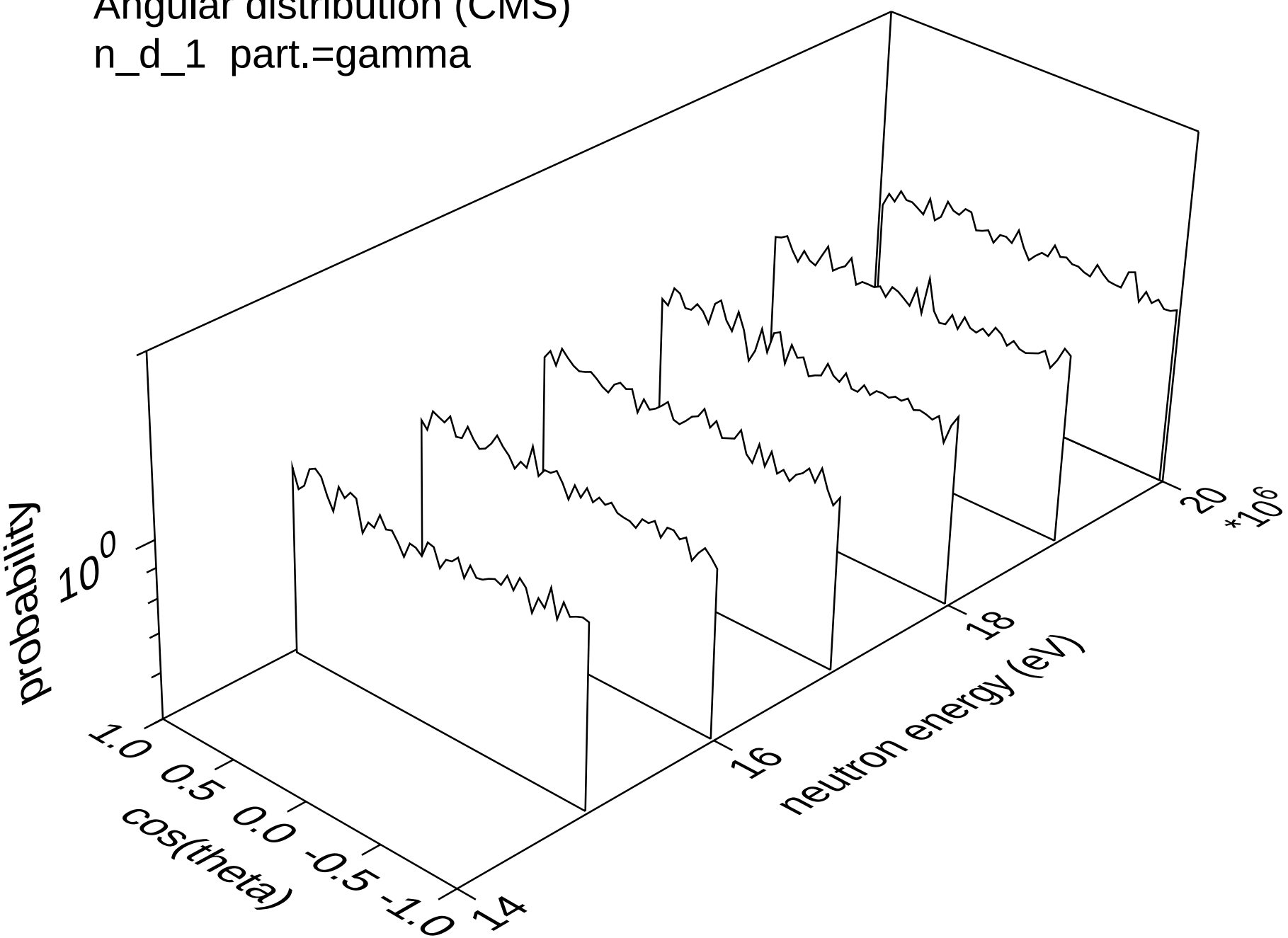

Angular distribution (CMS)
n_p_4 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

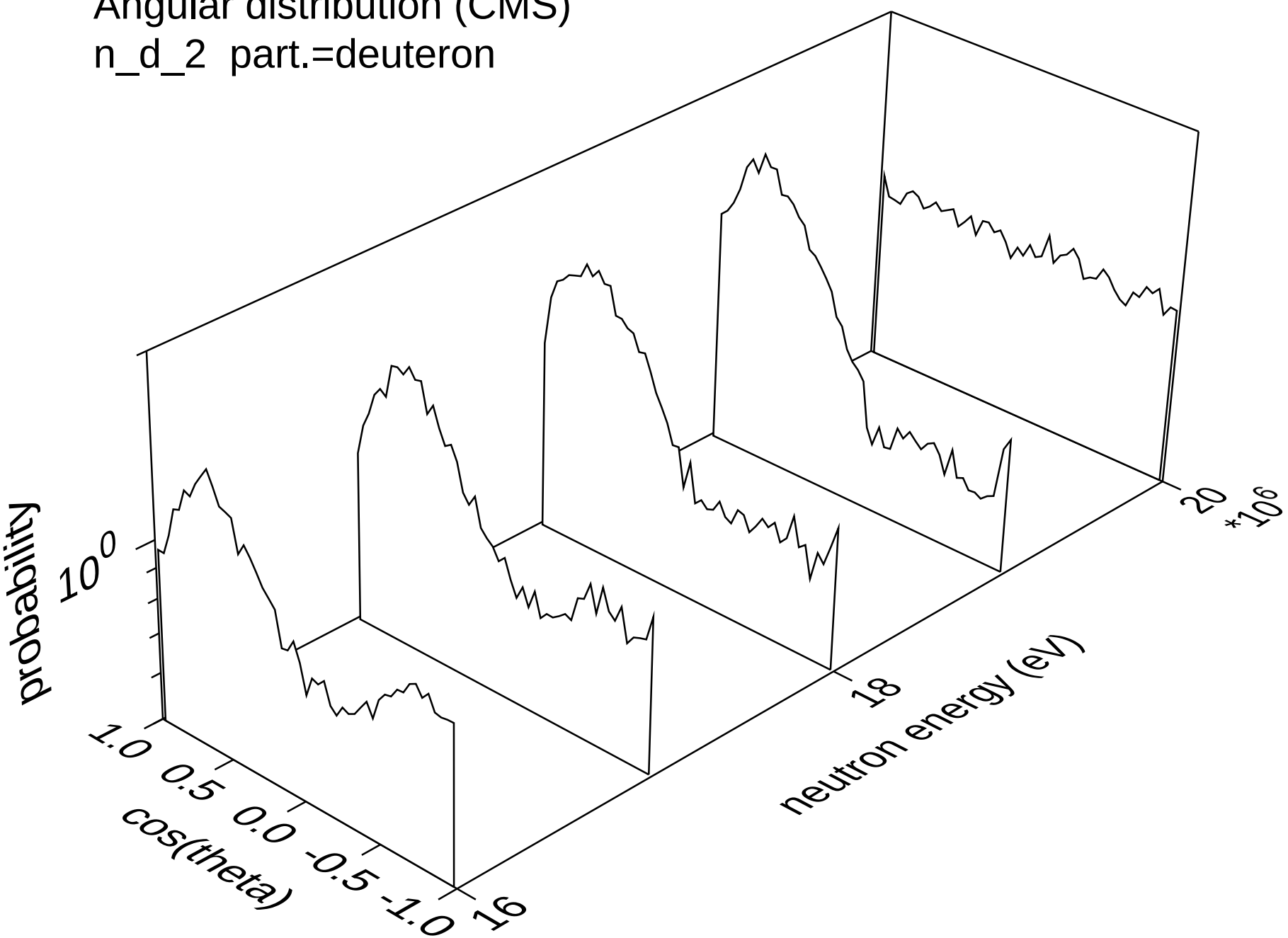

Angular distribution (CMS)
n_p_cont part.=proton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

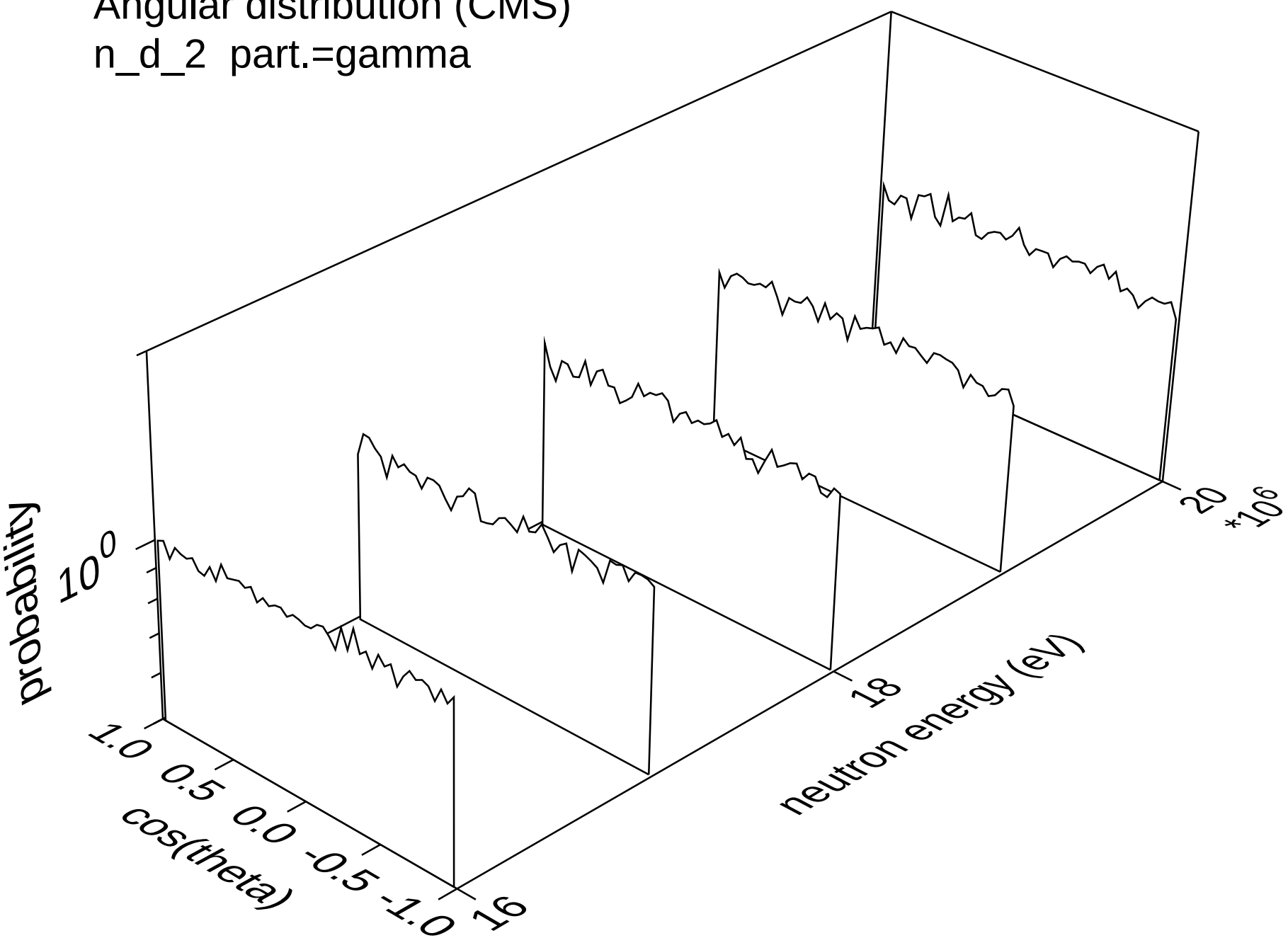

Angular distribution (CMS)
n_p_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

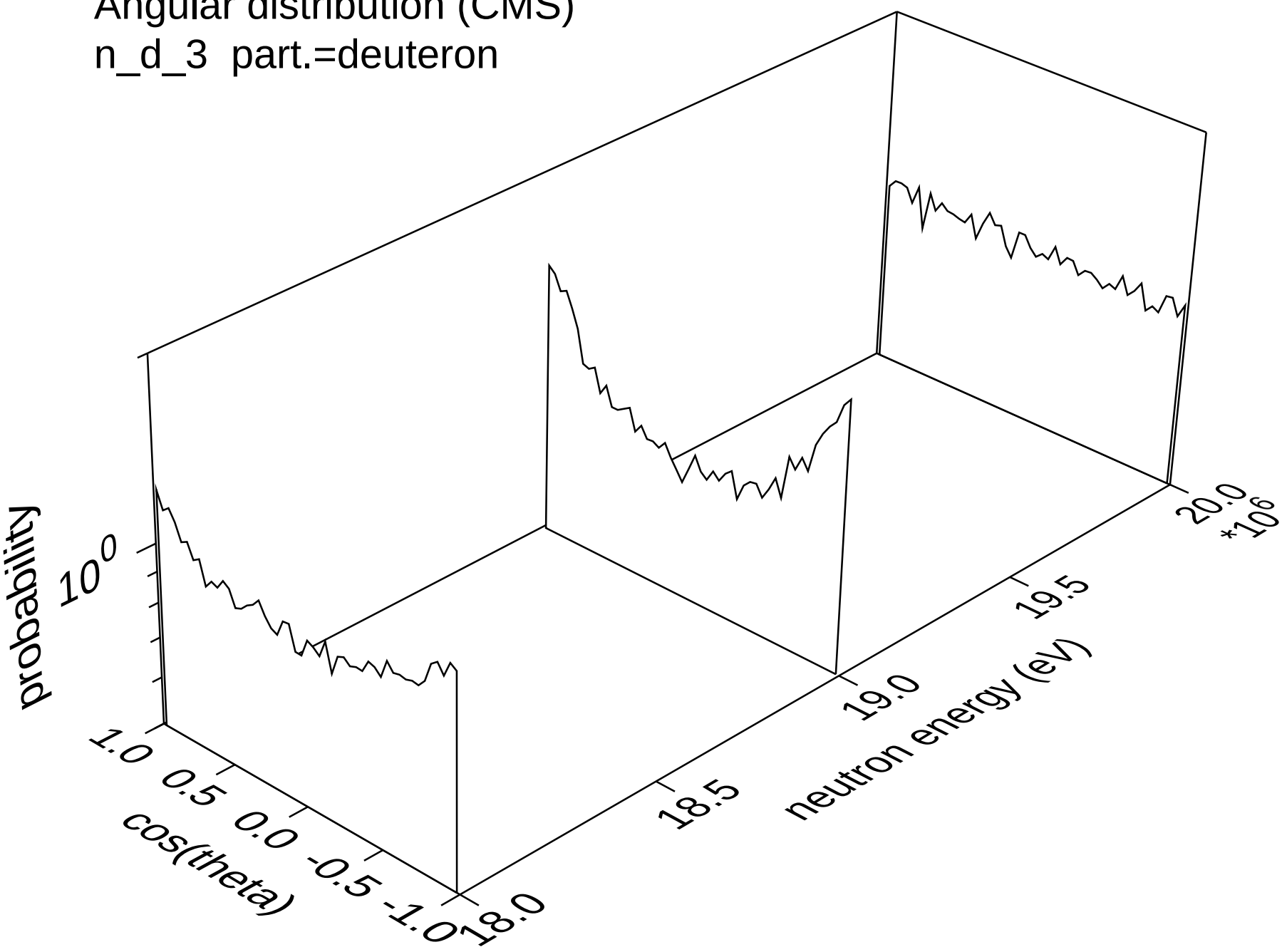

Angular distribution (CMS)
n_d_0
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

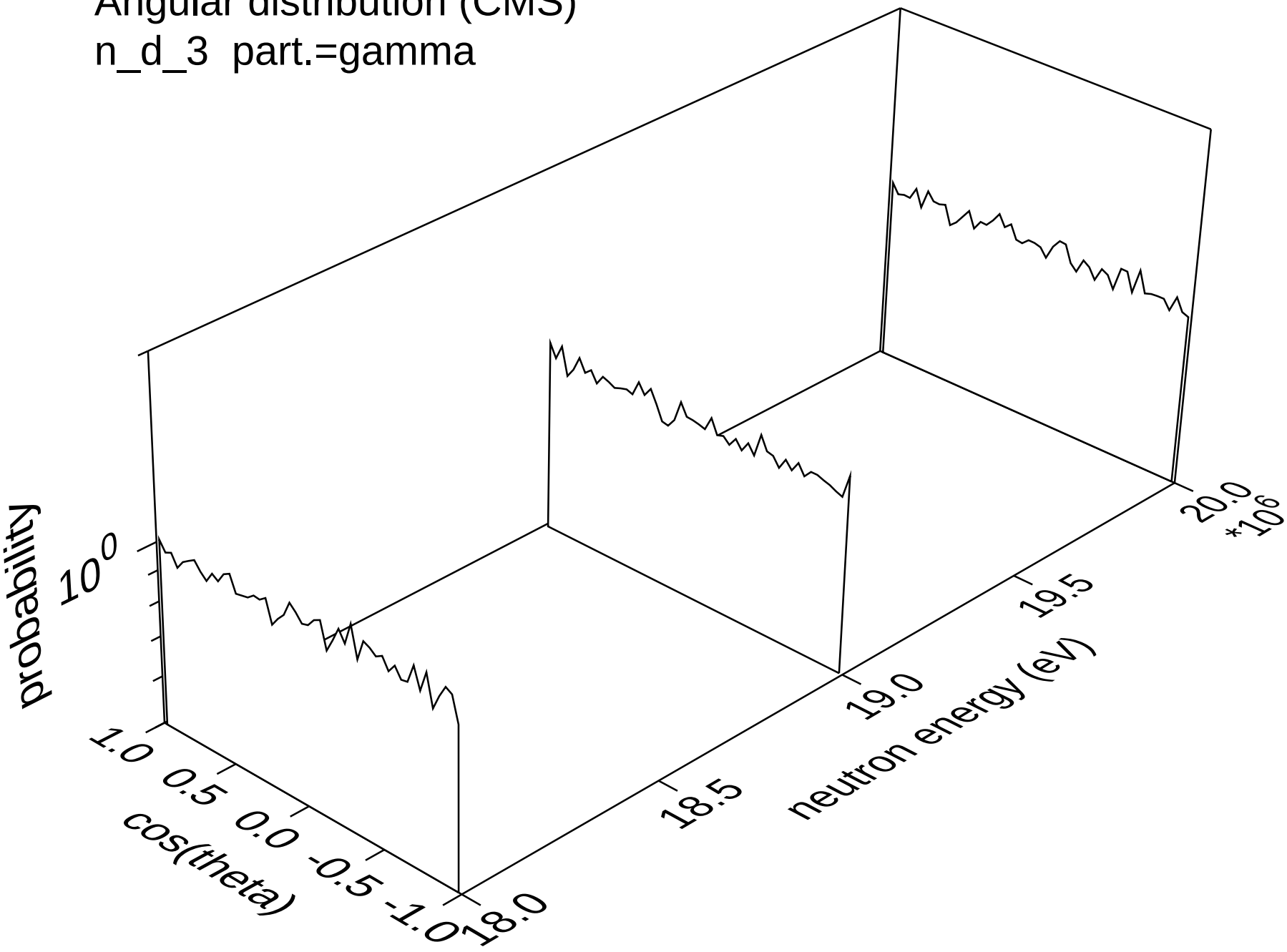

Angular distribution (CMS)
n_d_1 part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

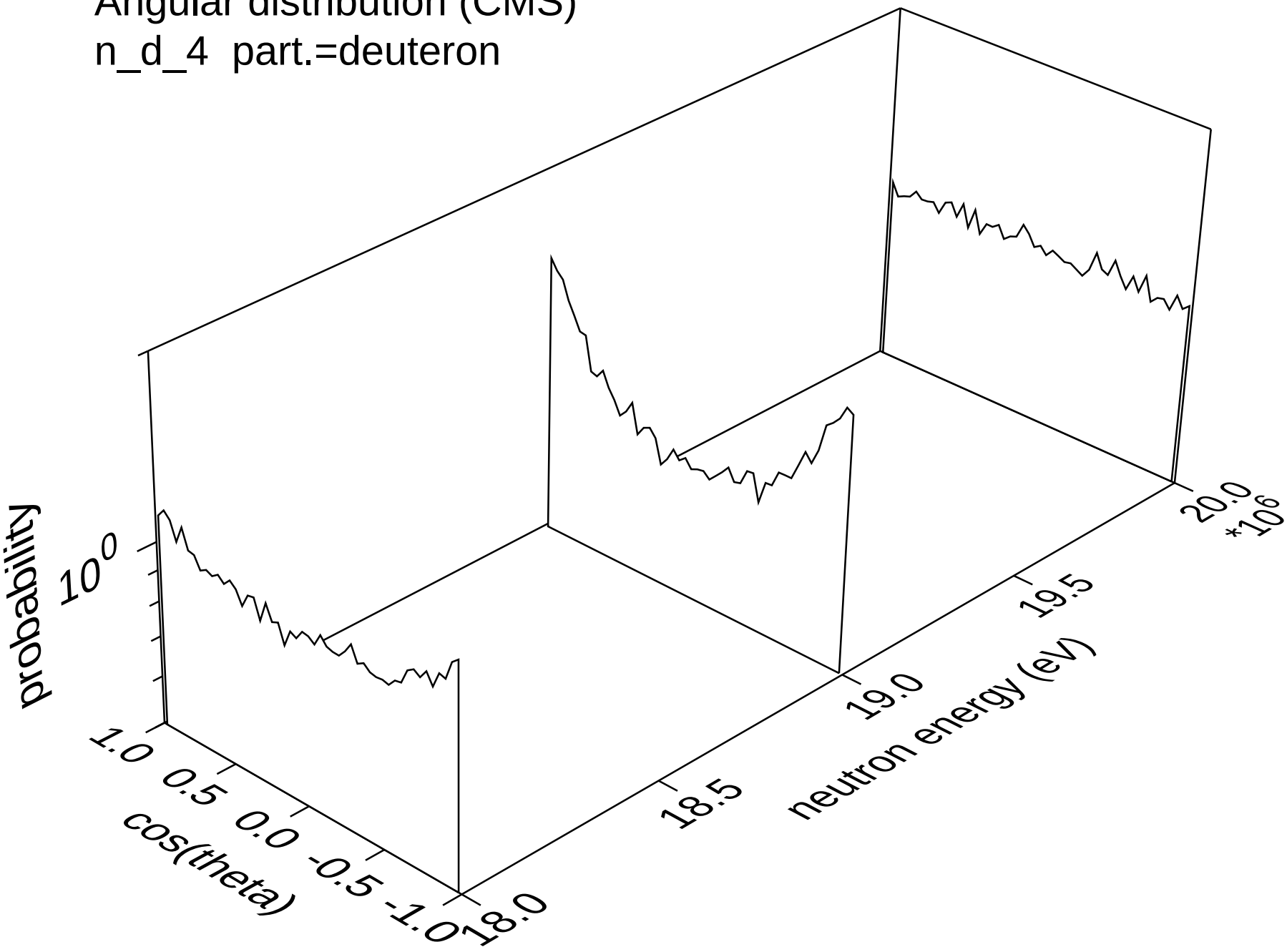

Angular distribution (CMS)
n_d_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

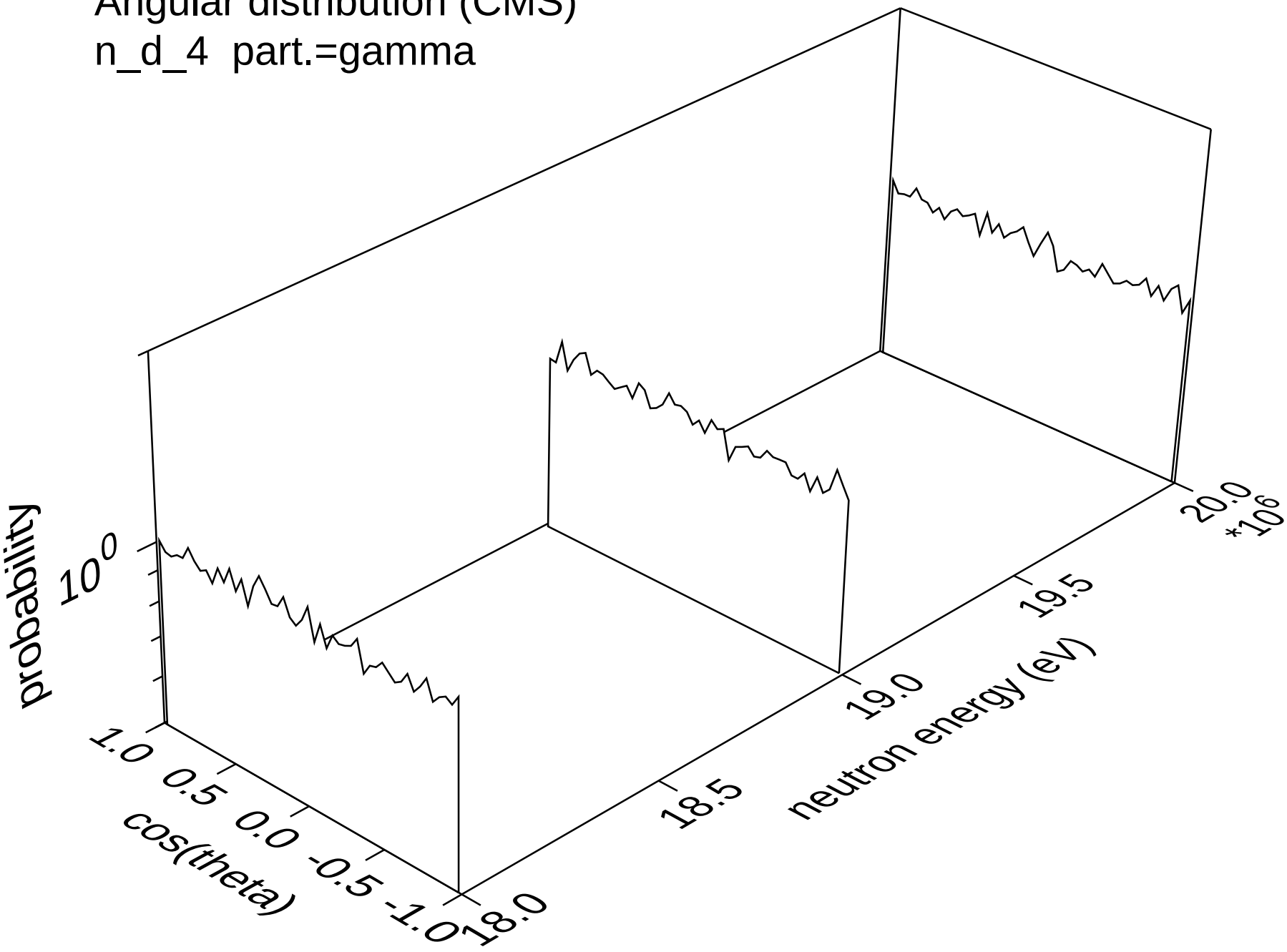

Angular distribution (CMS)
n_d_2 part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

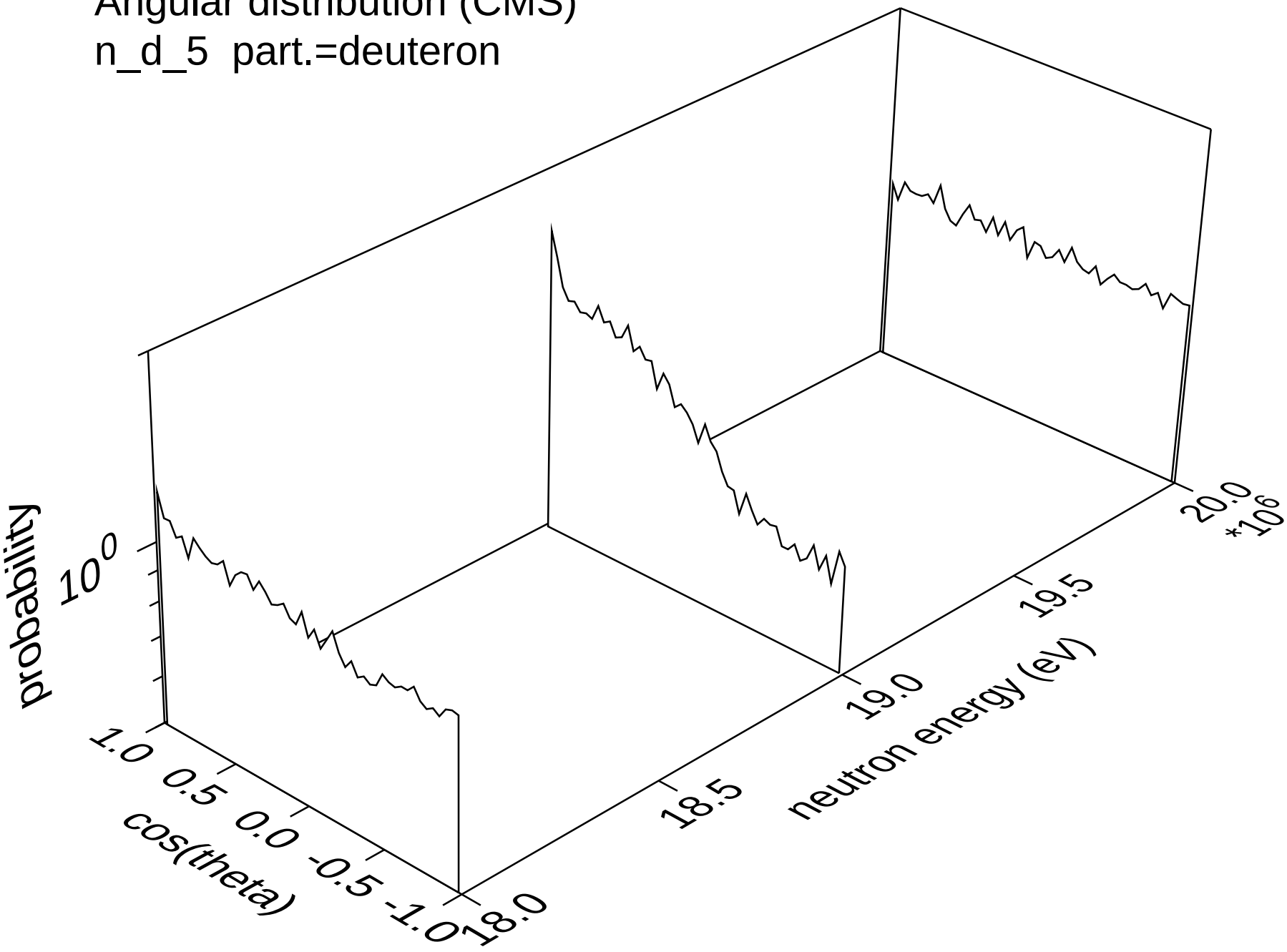

Angular distribution (CMS)
n_d_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
16
18
20
*10^6
neutron energy (eV)

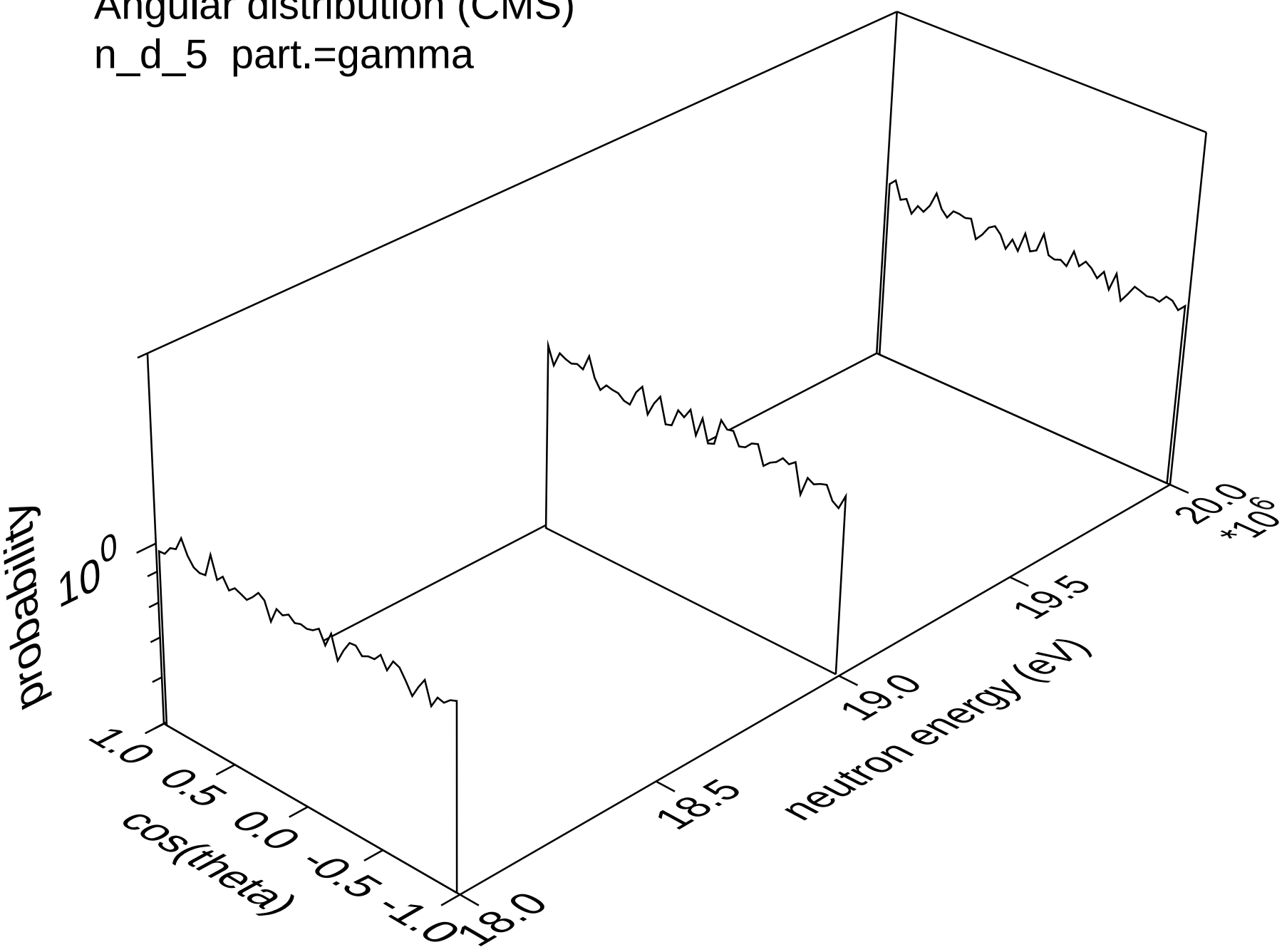

Angular distribution (CMS)
n_d_3 part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

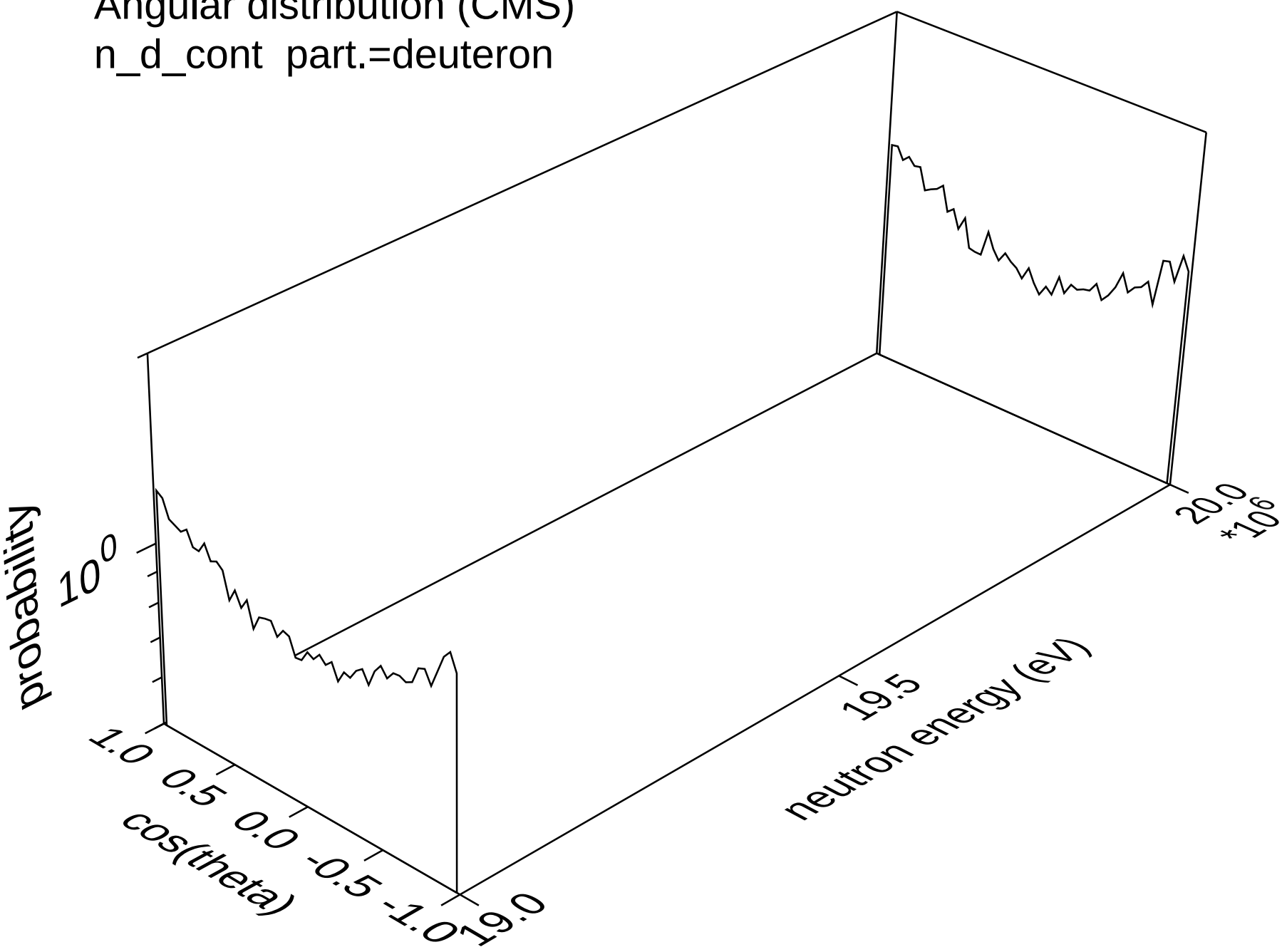

Angular distribution (CMS)
n_d_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

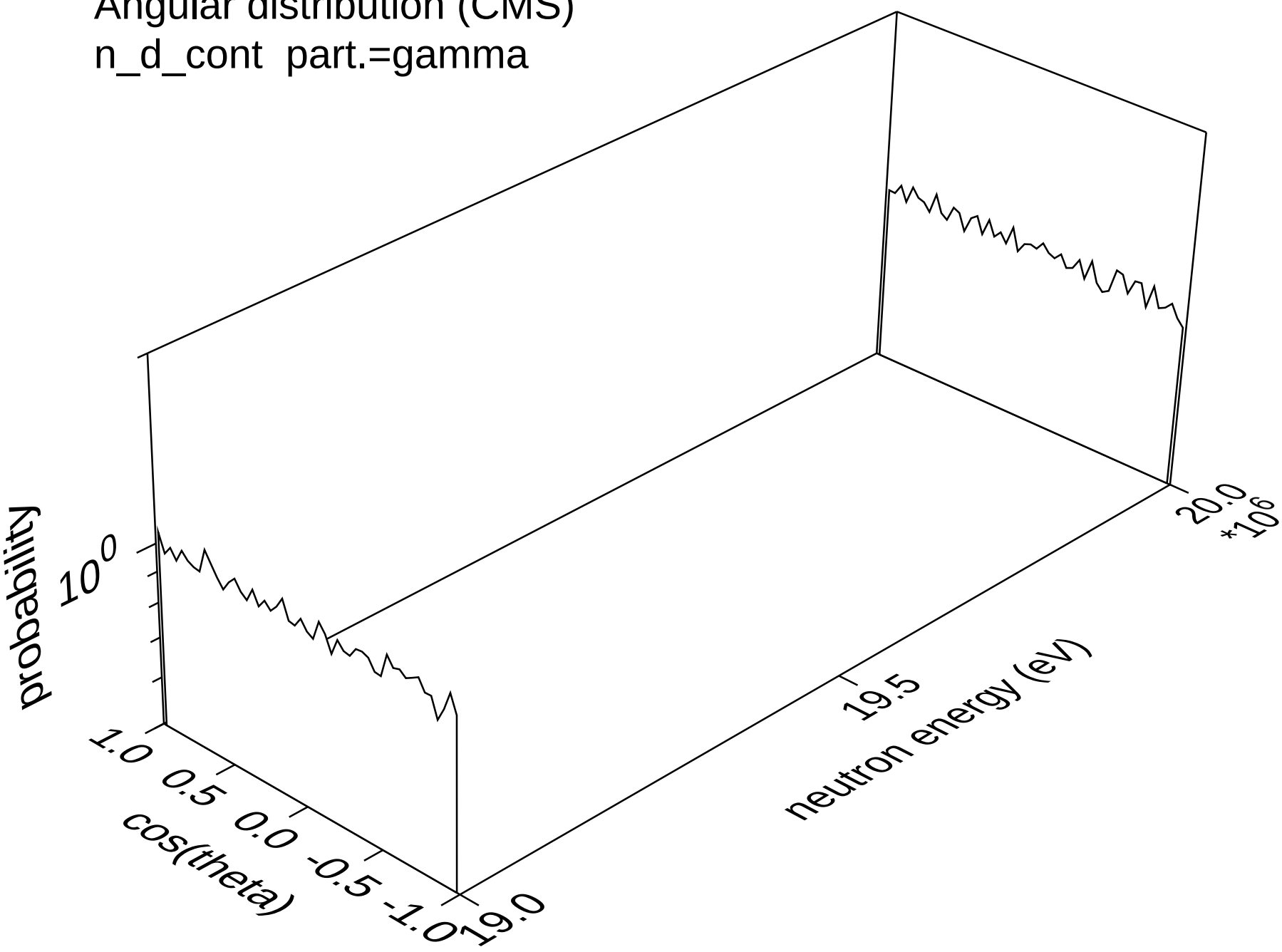

Angular distribution (CMS)
n_d_4 part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

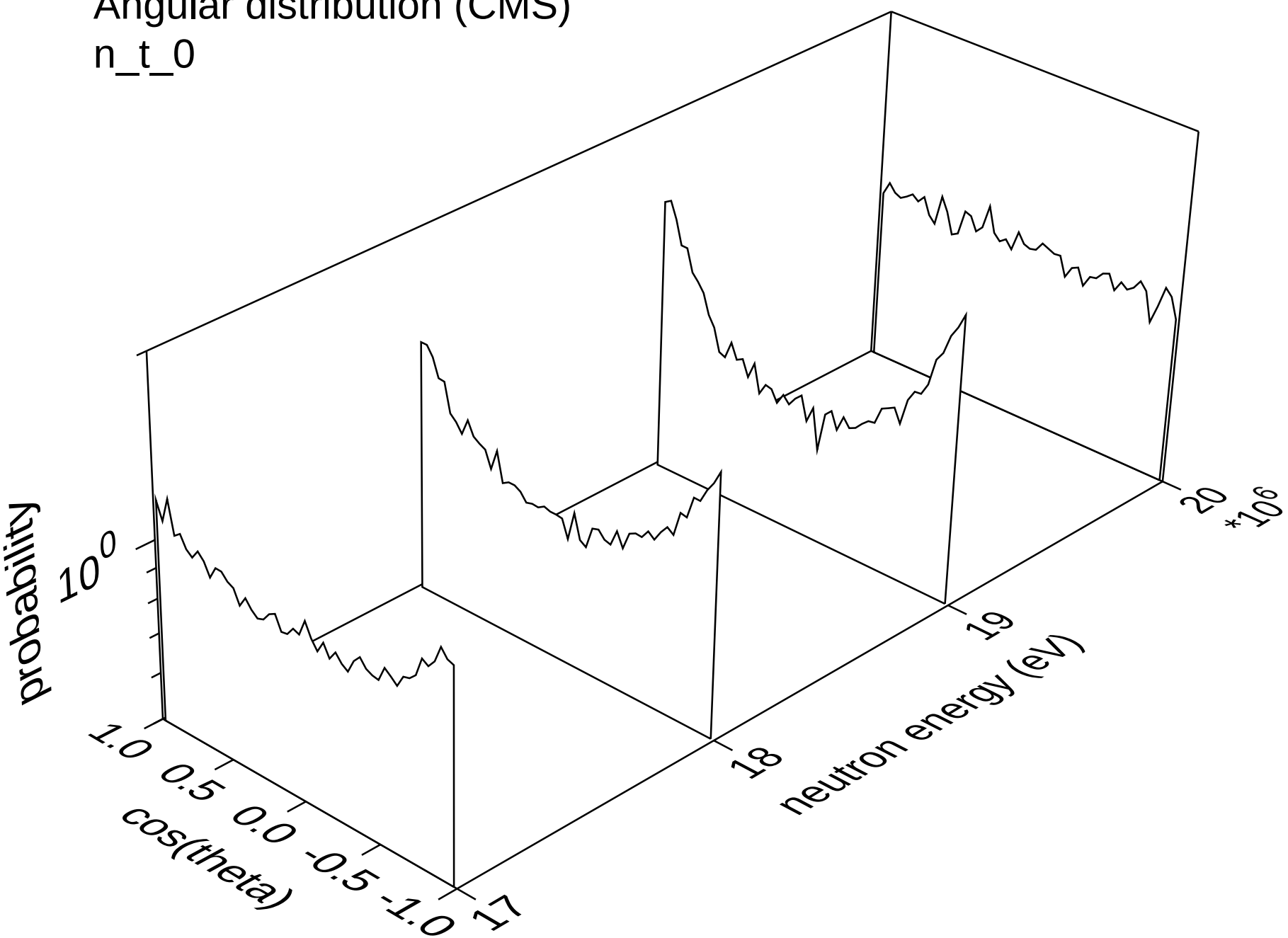

Angular distribution (CMS)
n_d_4 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

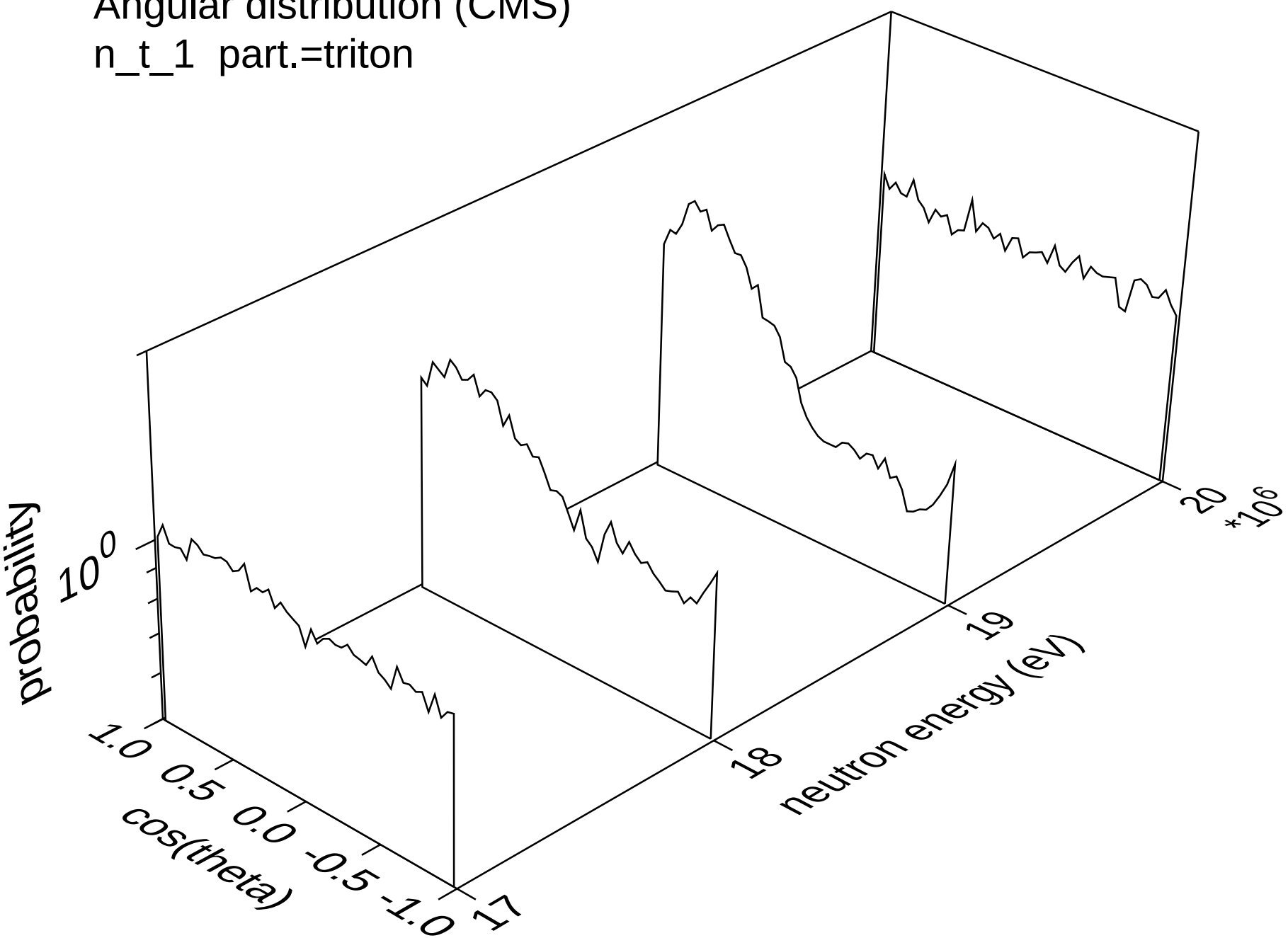

Angular distribution (CMS)
n_d_5 part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

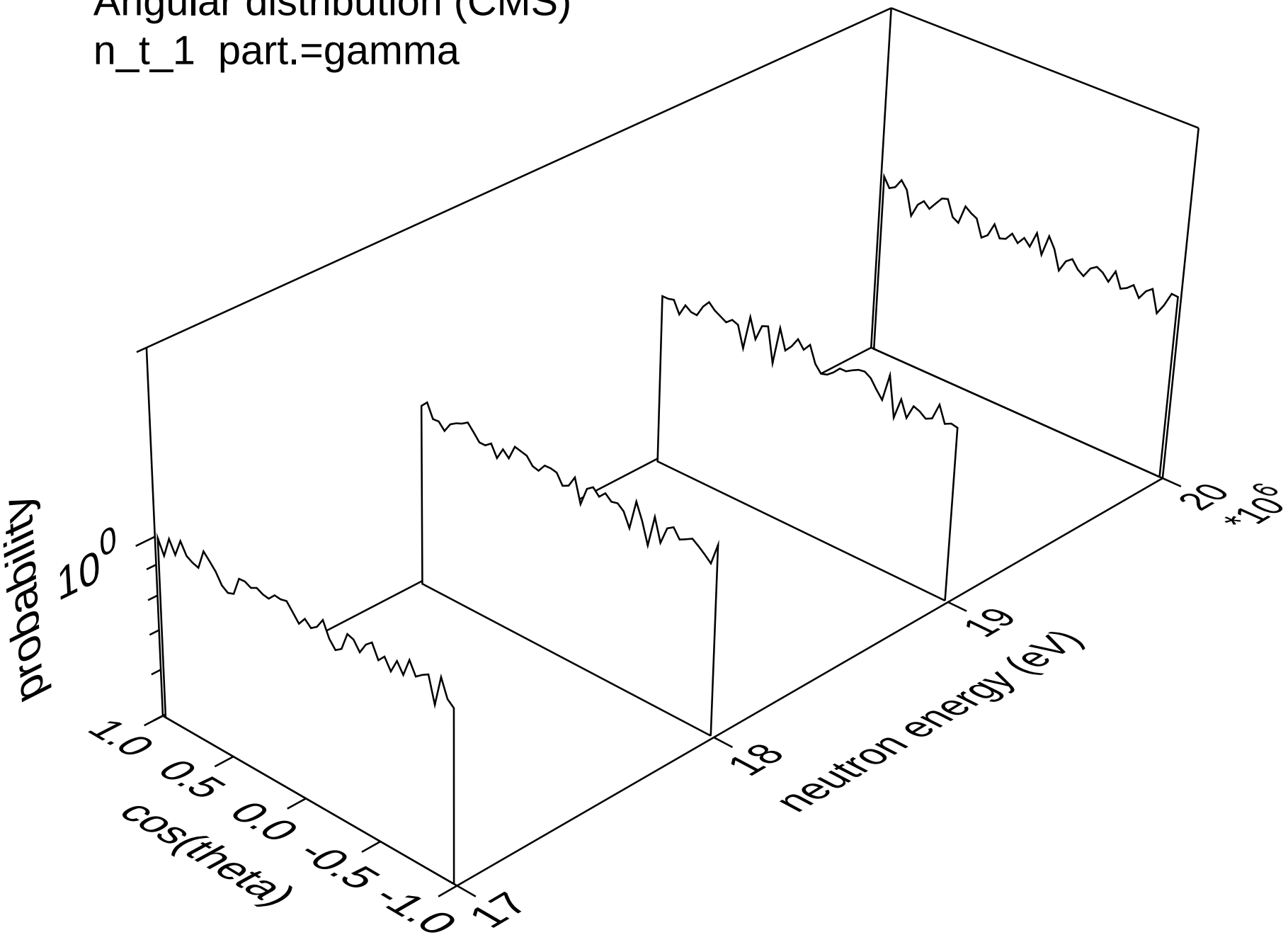

Angular distribution (CMS)
n_d_5 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

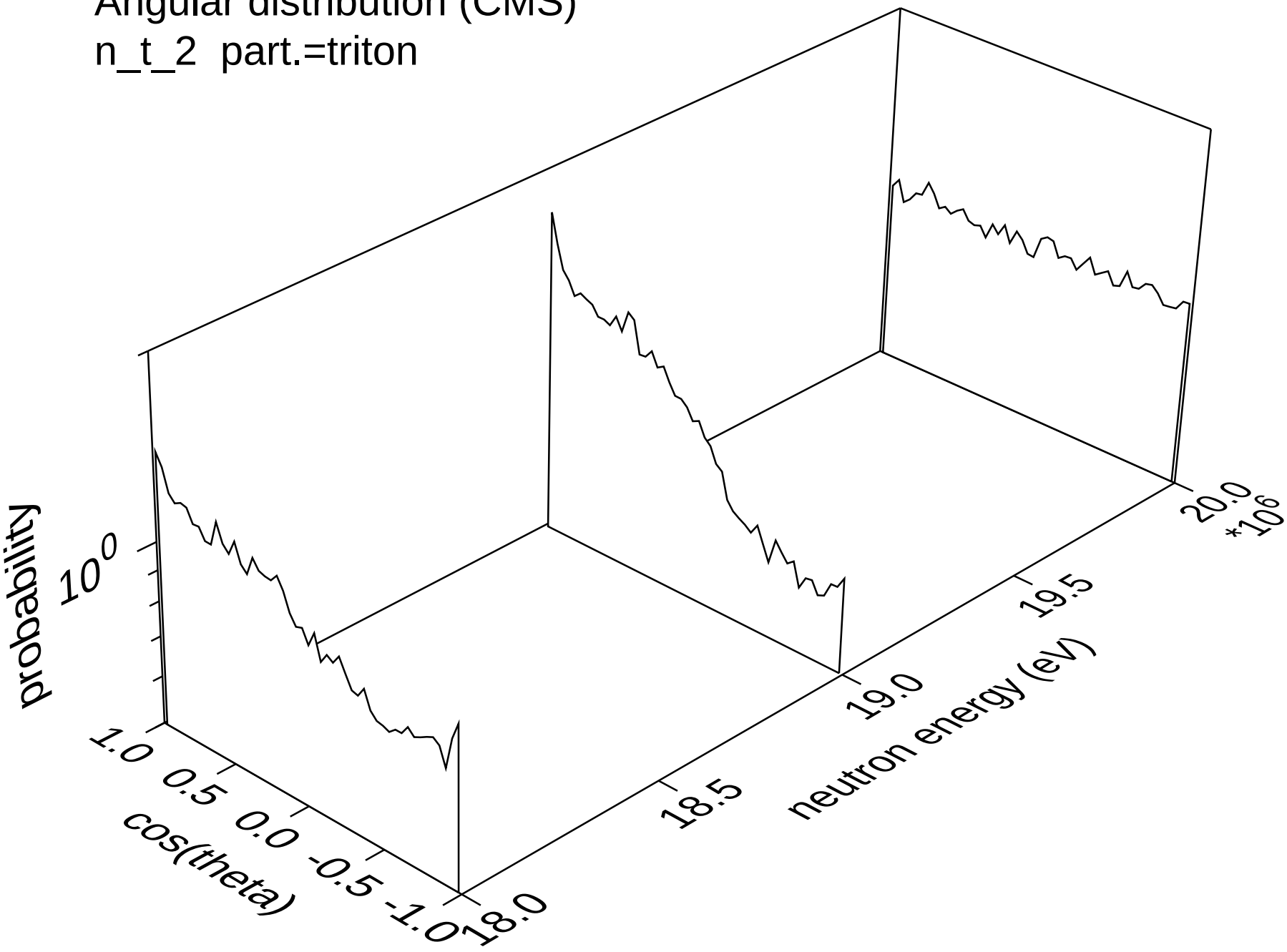

Angular distribution (CMS)
n_d_cont part.=deuteron
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

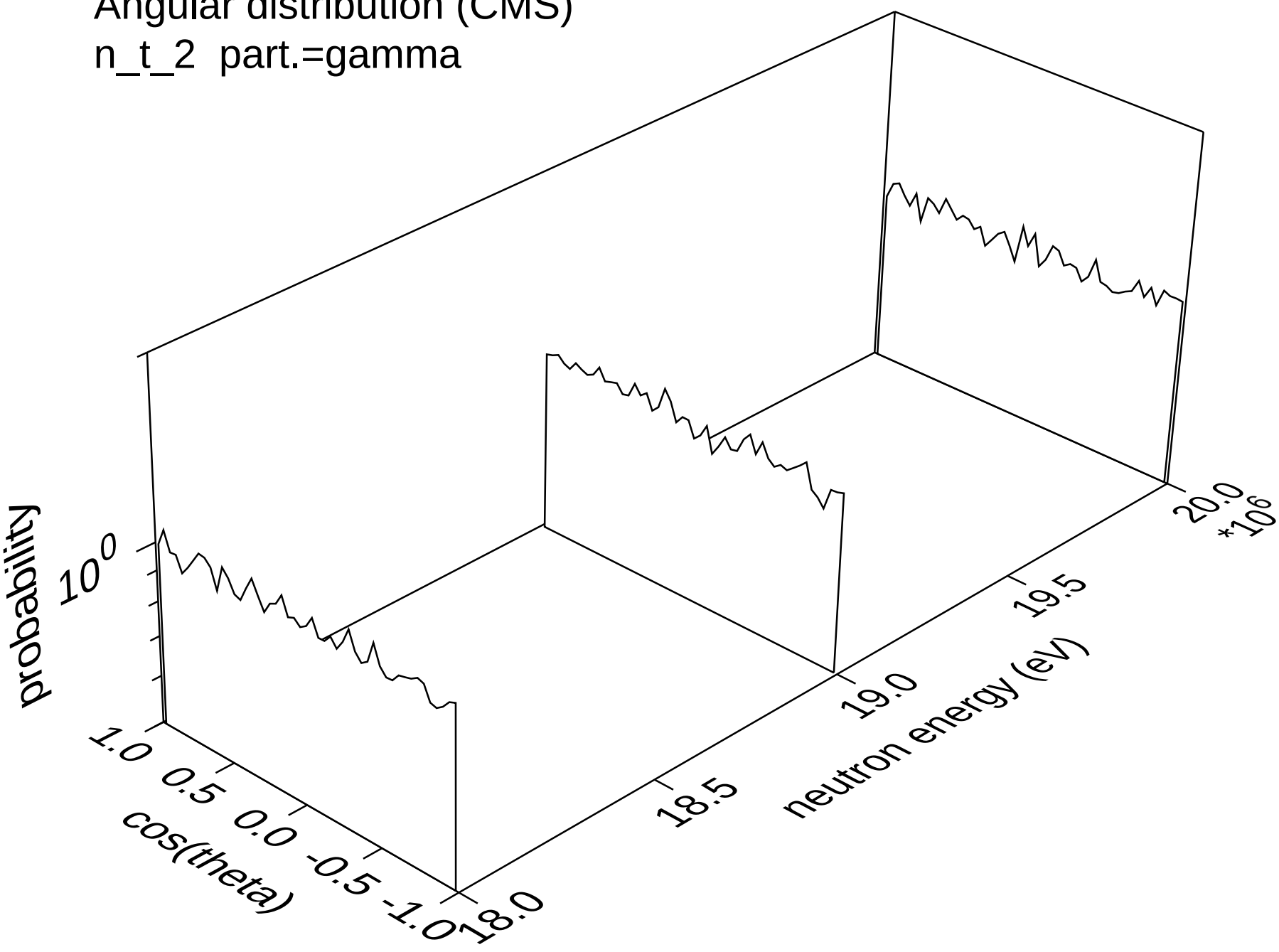

Angular distribution (CMS)
n_d_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

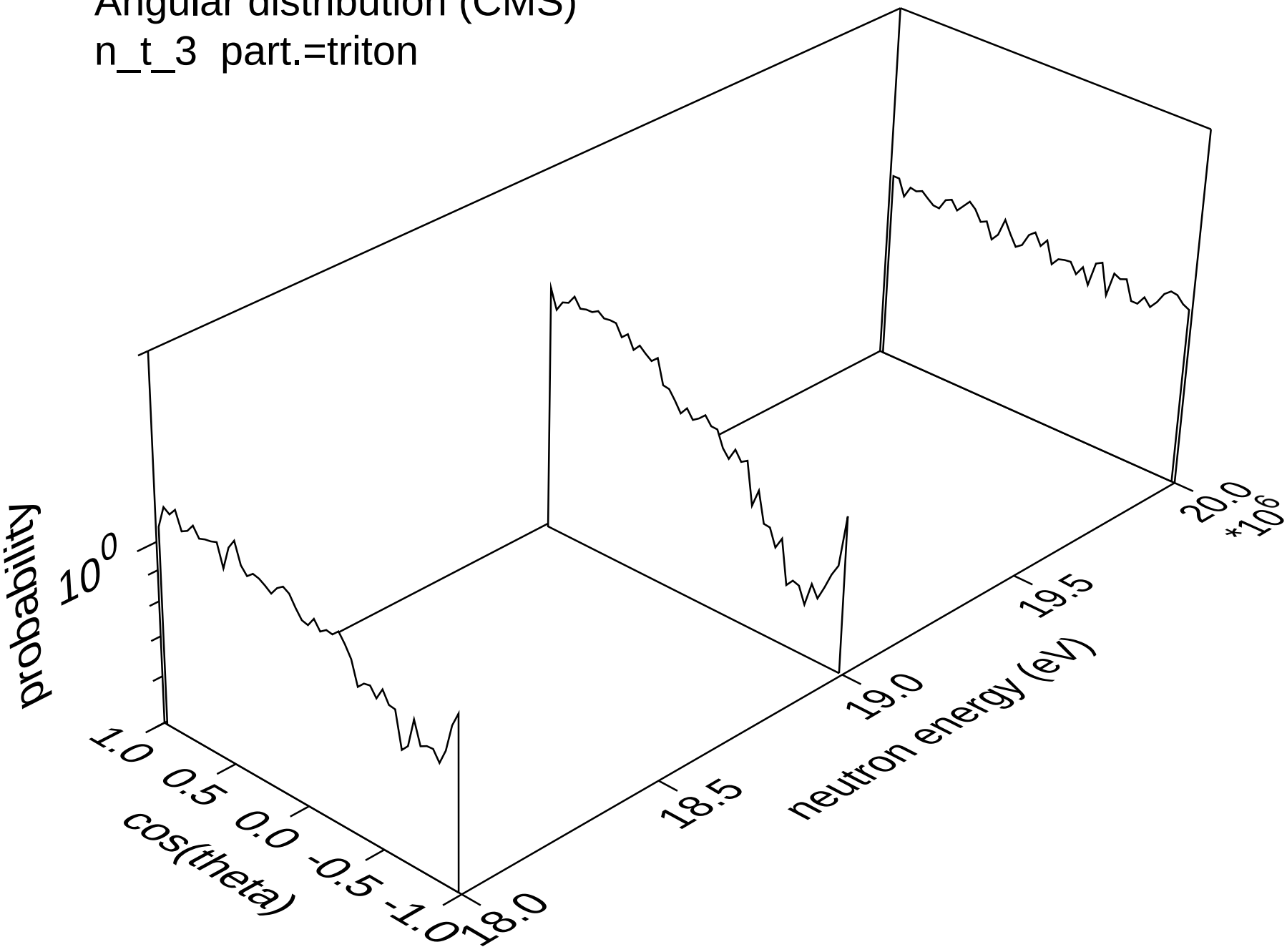

Angular distribution (CMS)
n_t_0
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

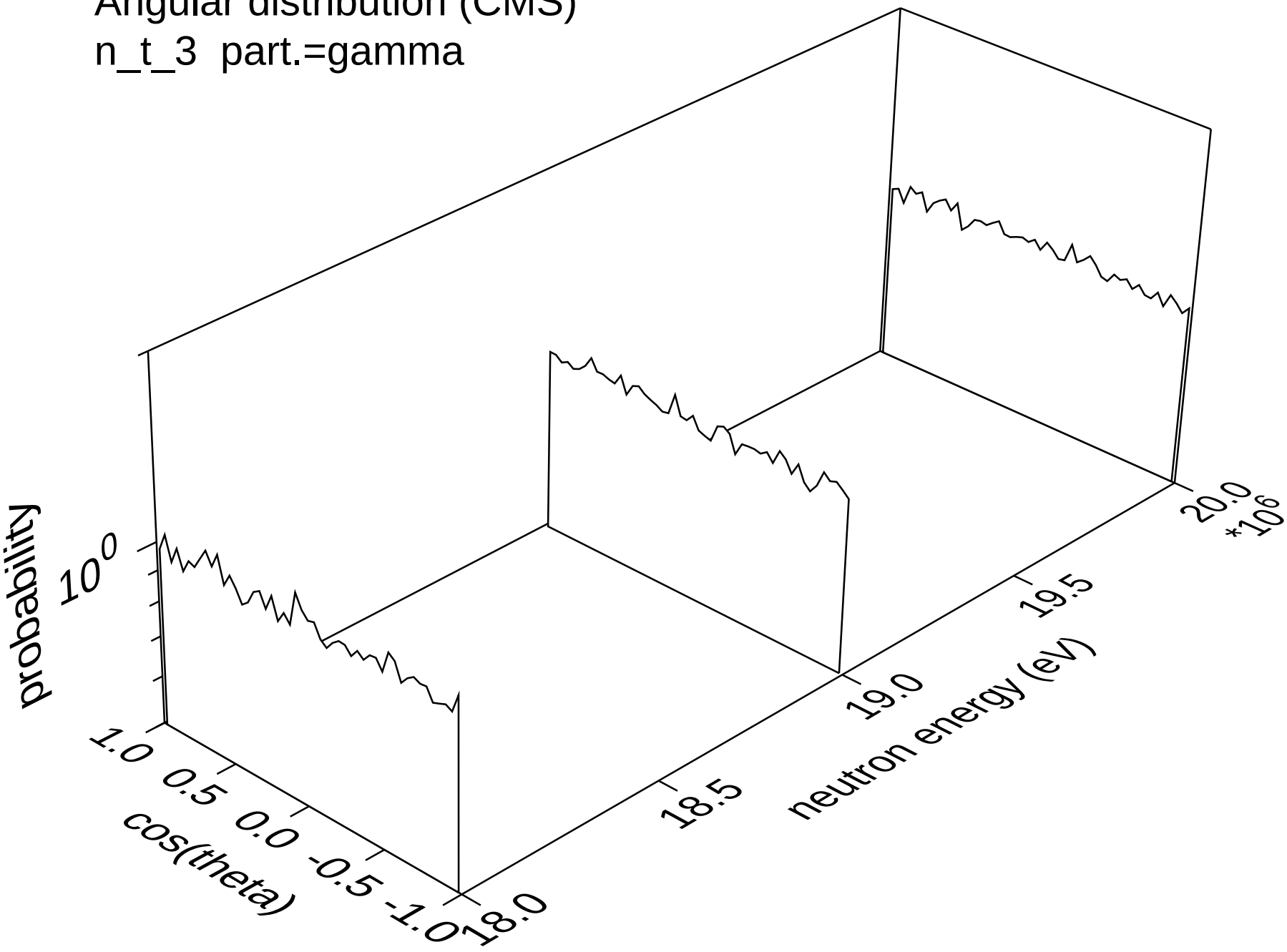

Angular distribution (CMS)
n_t_1 part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

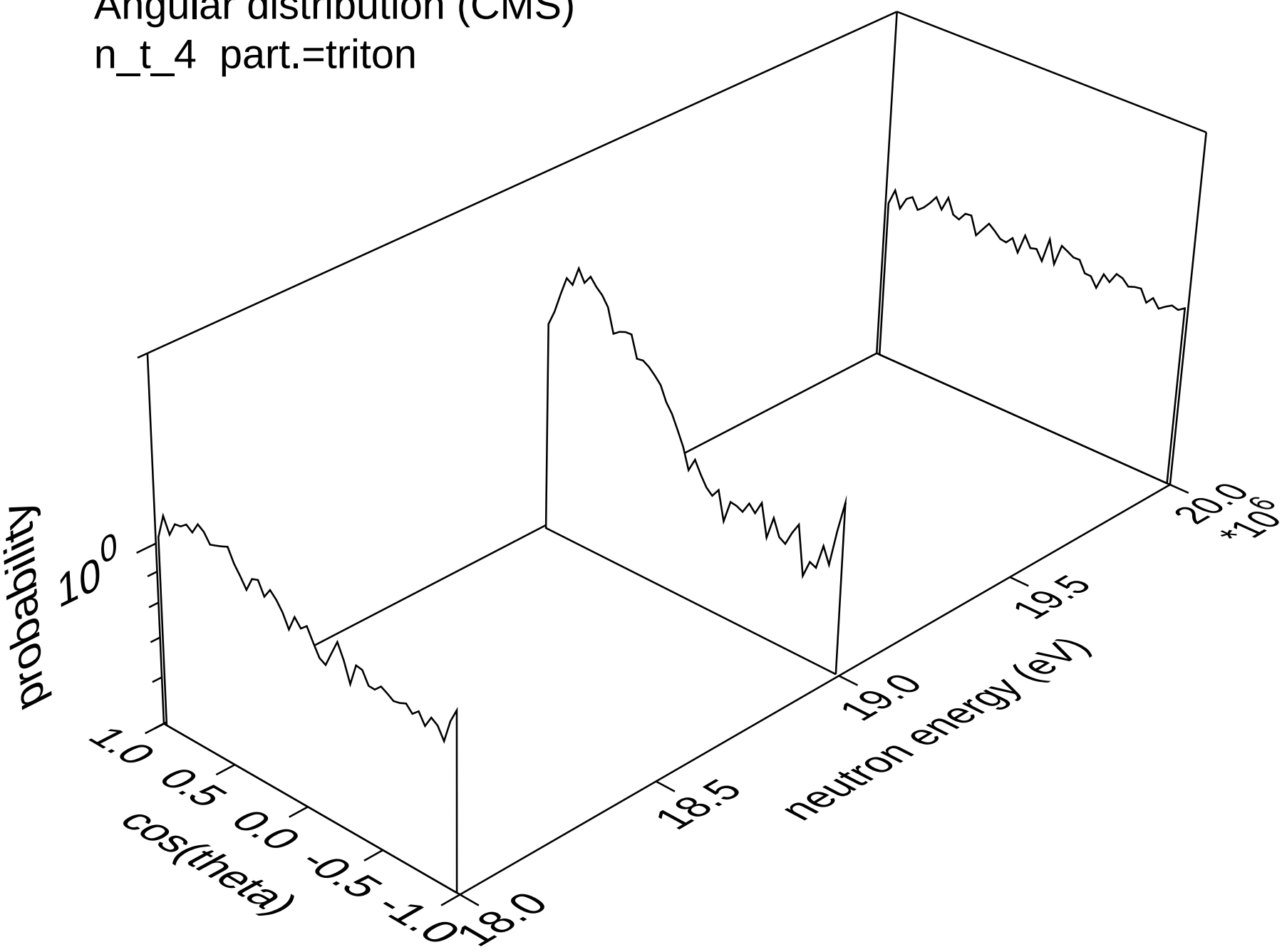

Angular distribution (CMS)
n_t_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
17
18
19
20
*10^6
neutron energy (eV)

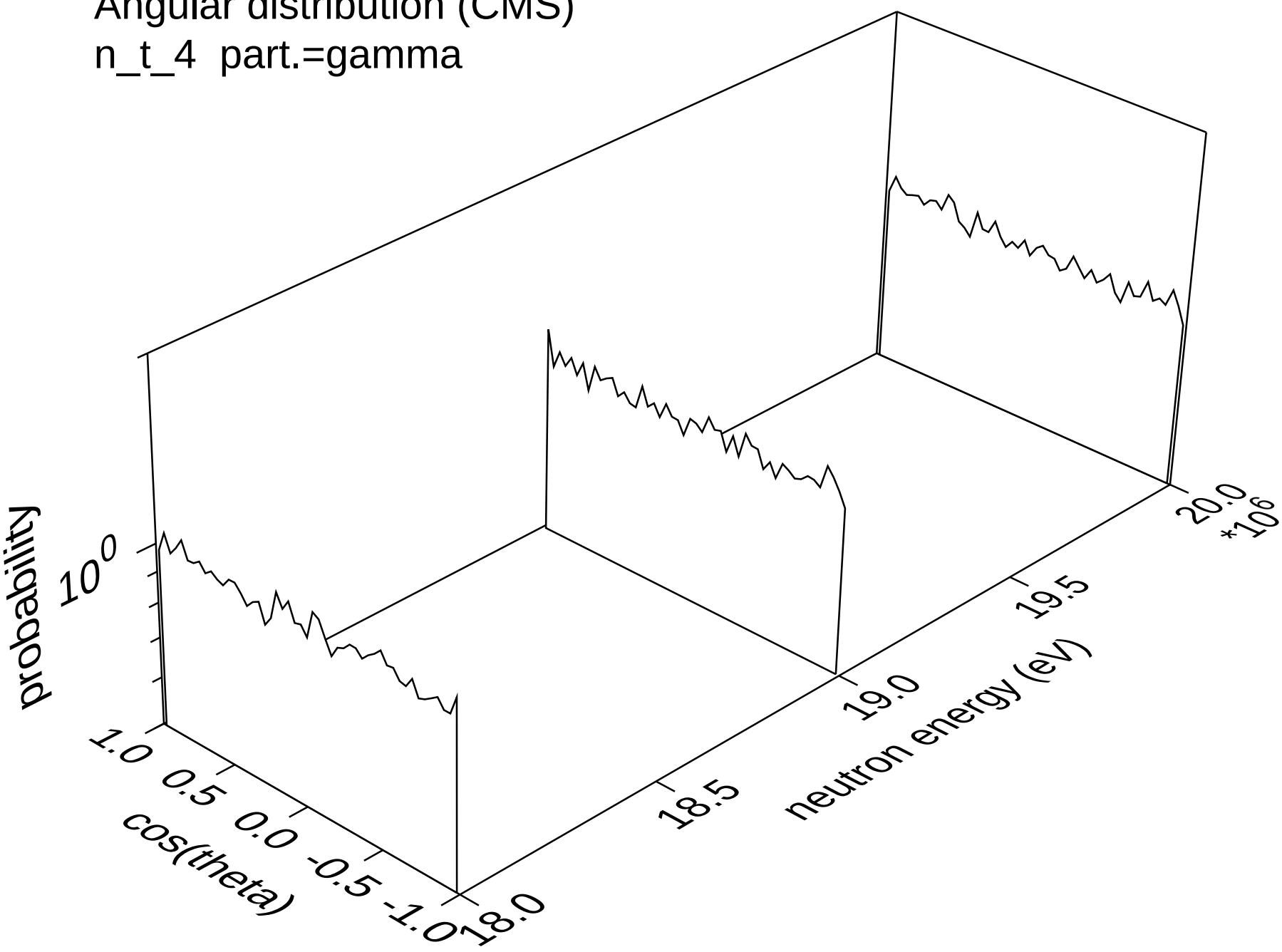

Angular distribution (CMS)
n_t_2 part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

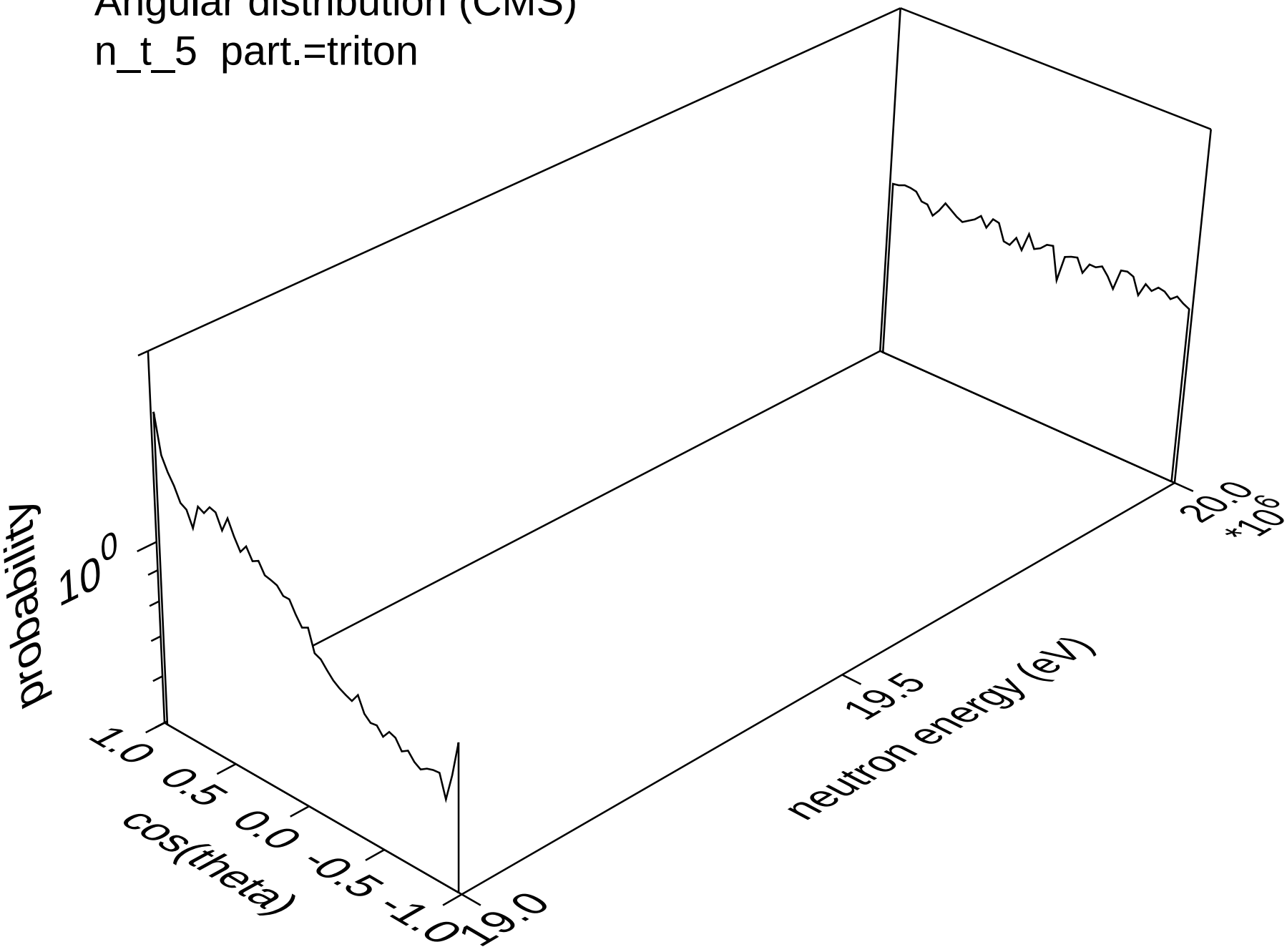

Angular distribution (CMS)
n_t_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

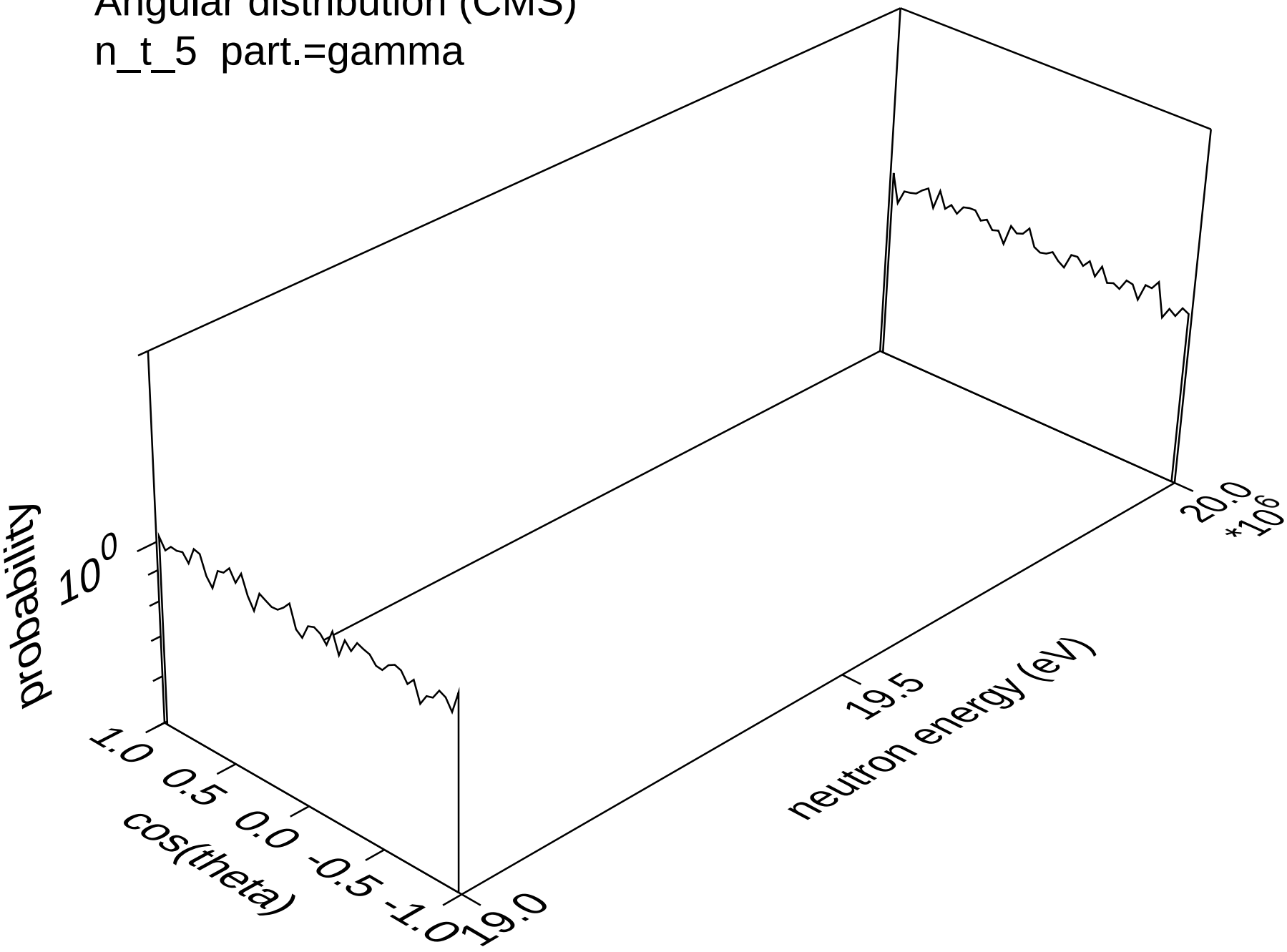

Angular distribution (CMS)
n_t_3 part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

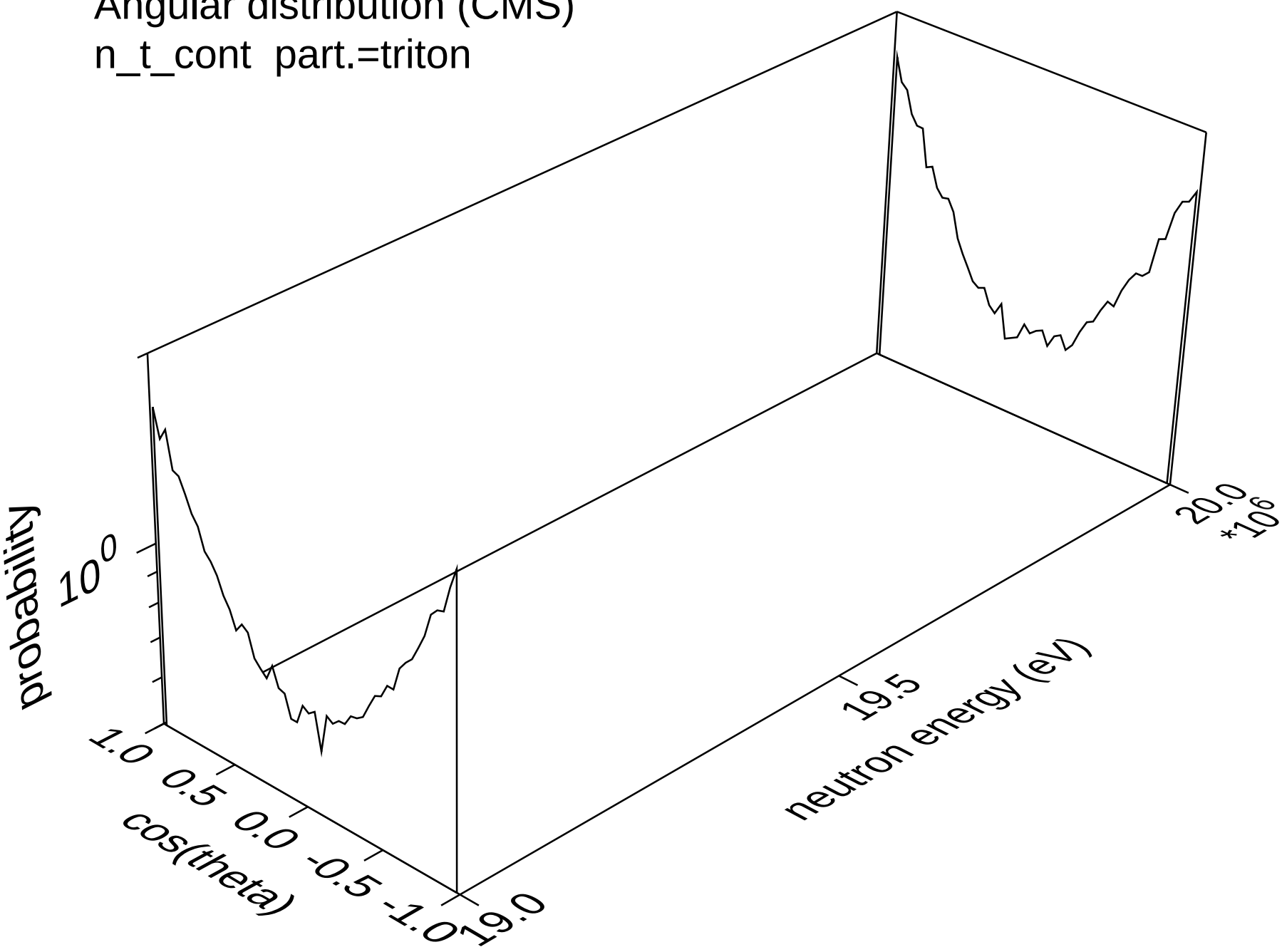

Angular distribution (CMS)
n_t_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

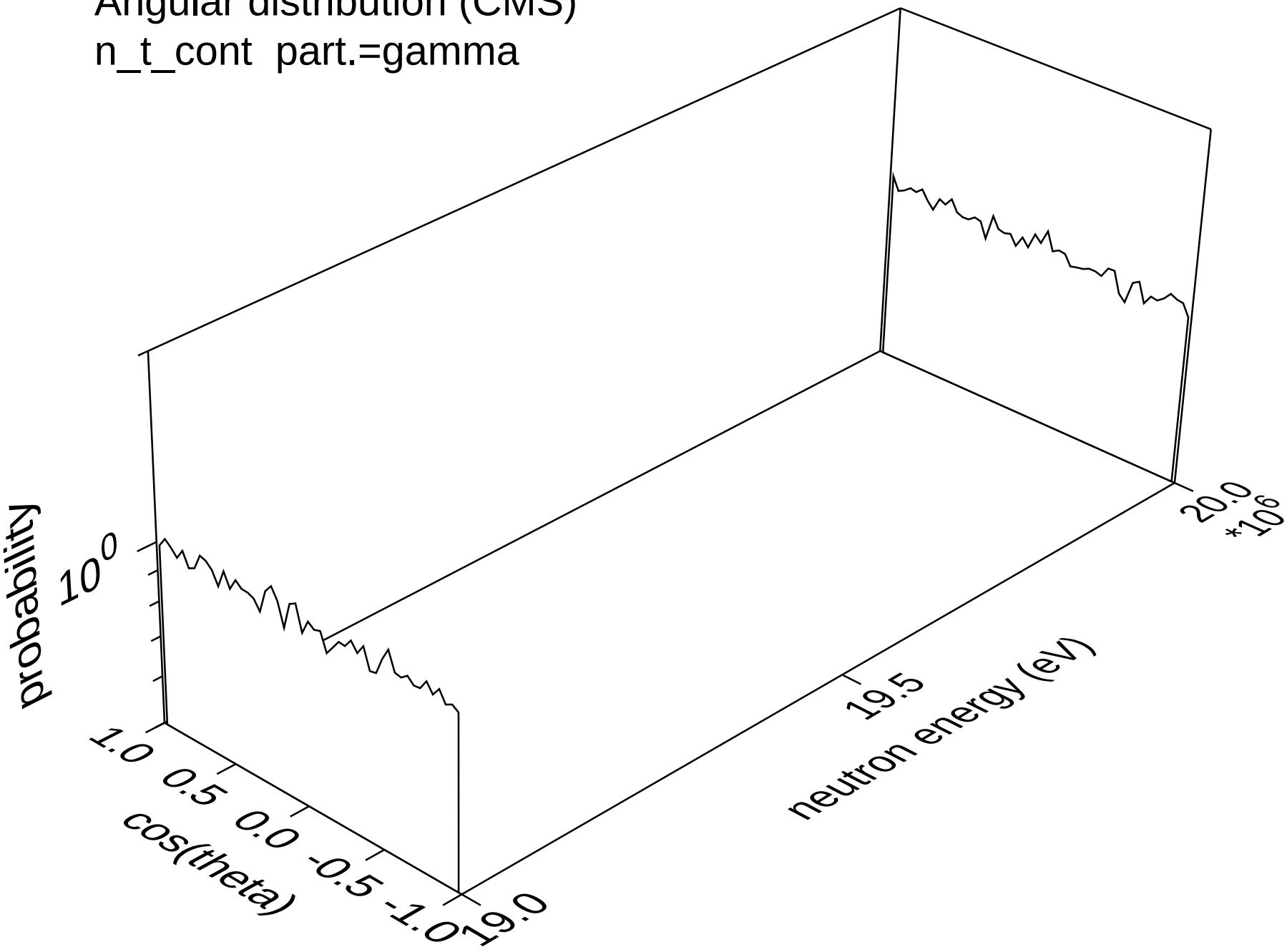

Angular distribution (CMS)
n_t_4 part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

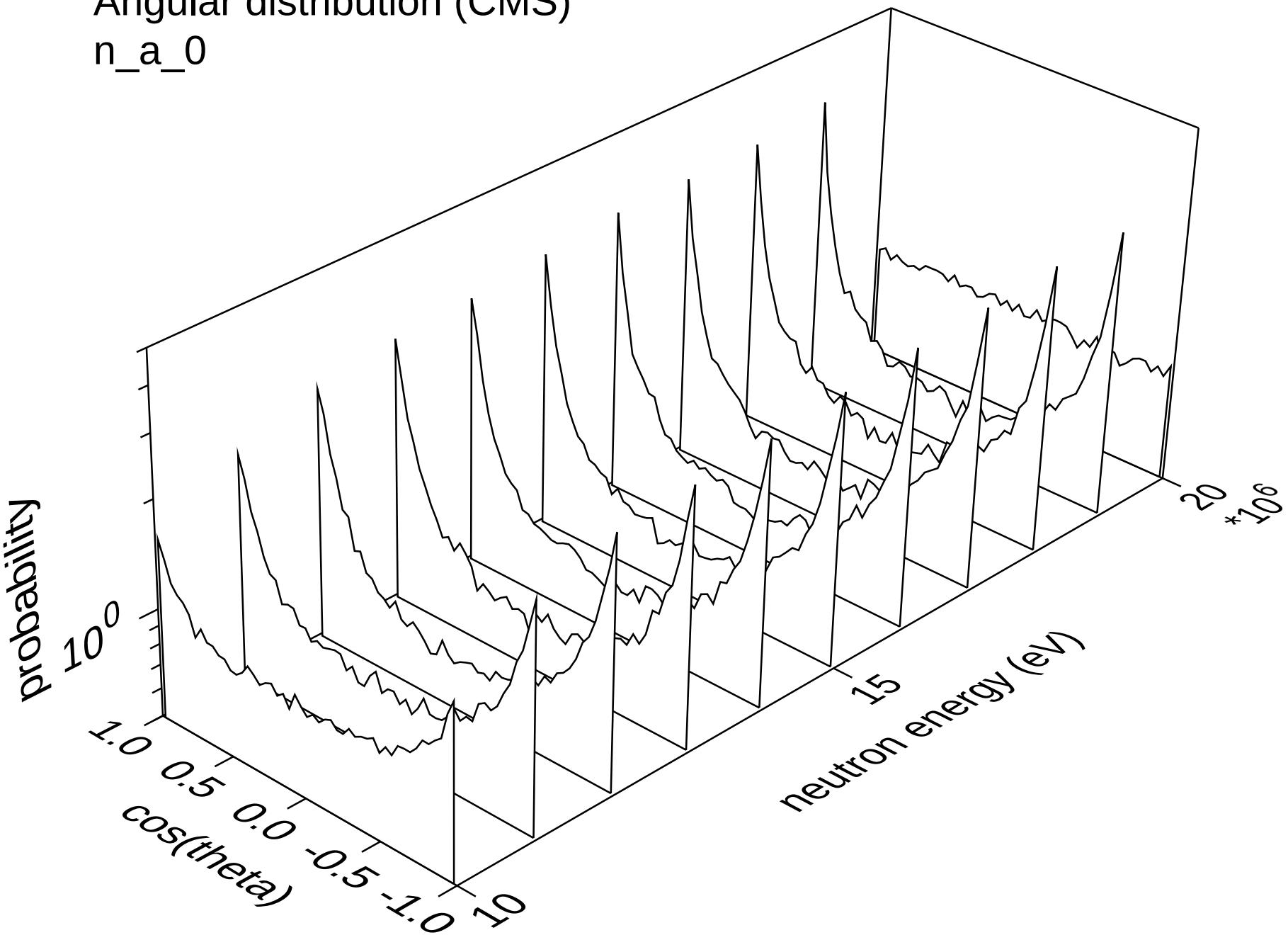

Angular distribution (CMS)
n_t_4 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
18.0
18.5
19.0
19.5
20.0
*10⁶
neutron energy (eV)

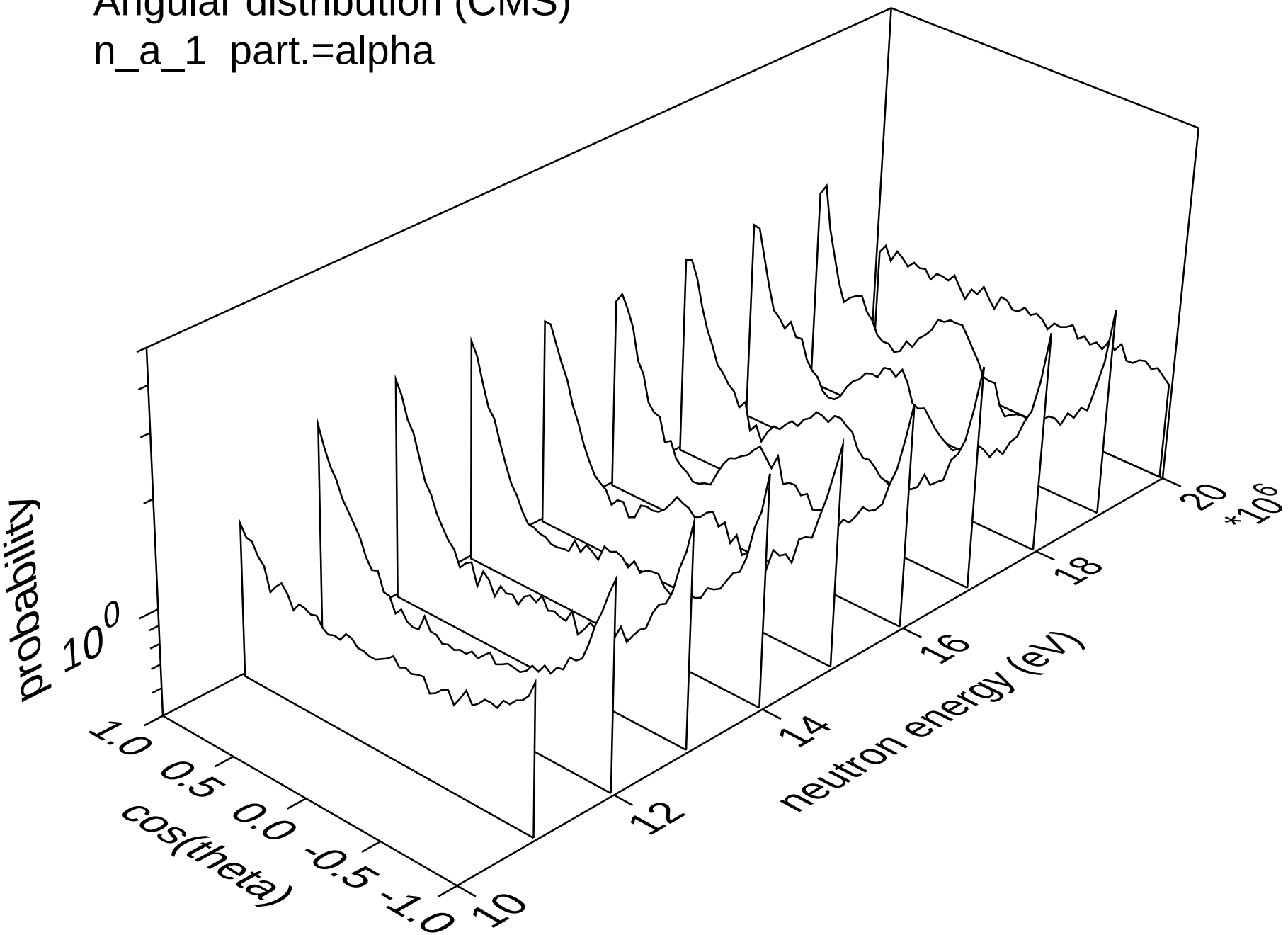

Angular distribution (CMS)
n_t_5 part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

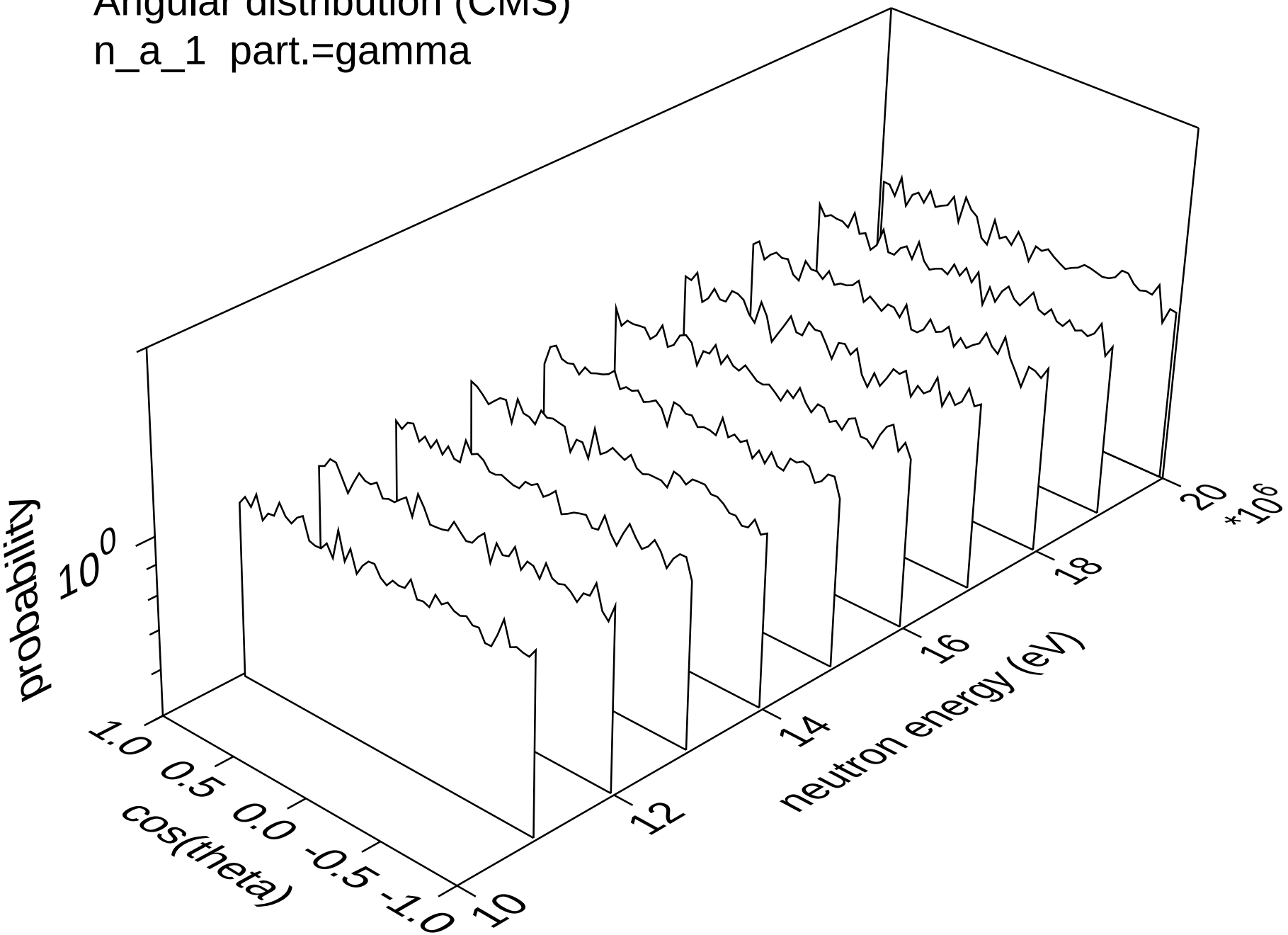

Angular distribution (CMS)
n_t_5 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

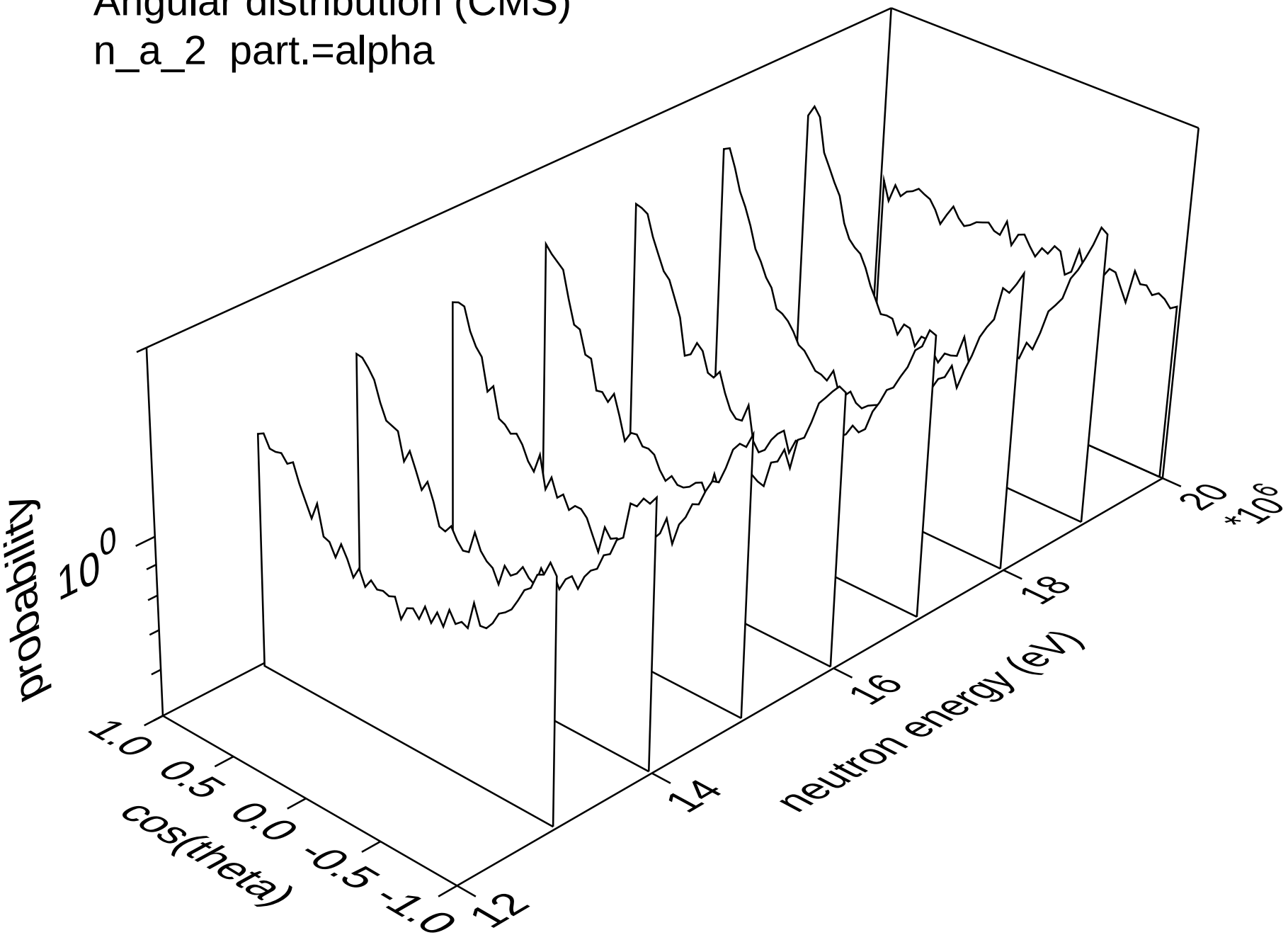

Angular distribution (CMS)
n_t_cont part.=triton
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

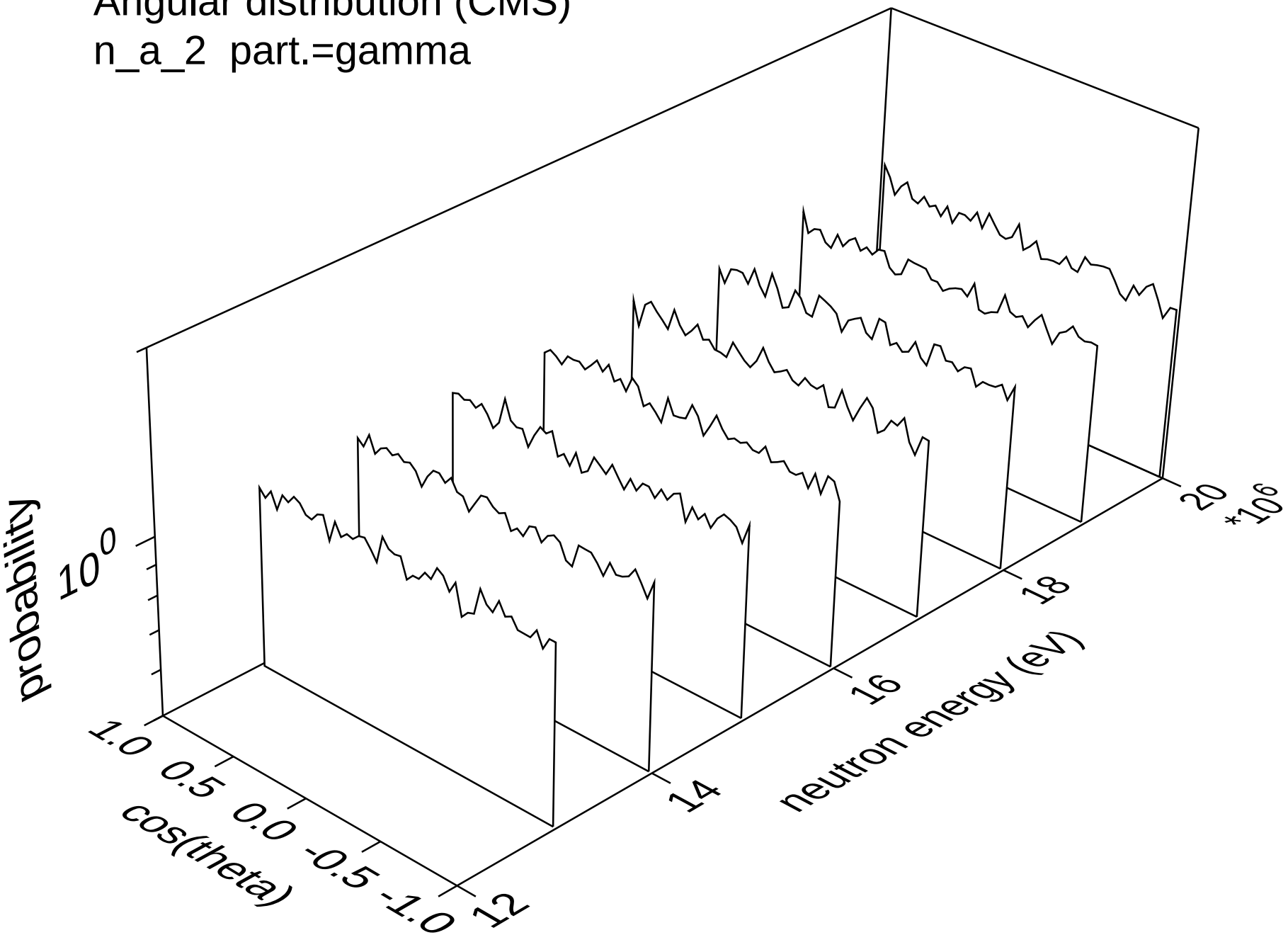

Angular distribution (CMS)
n_t_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
19.0
19.5
20.0
*10^6
neutron energy (eV)

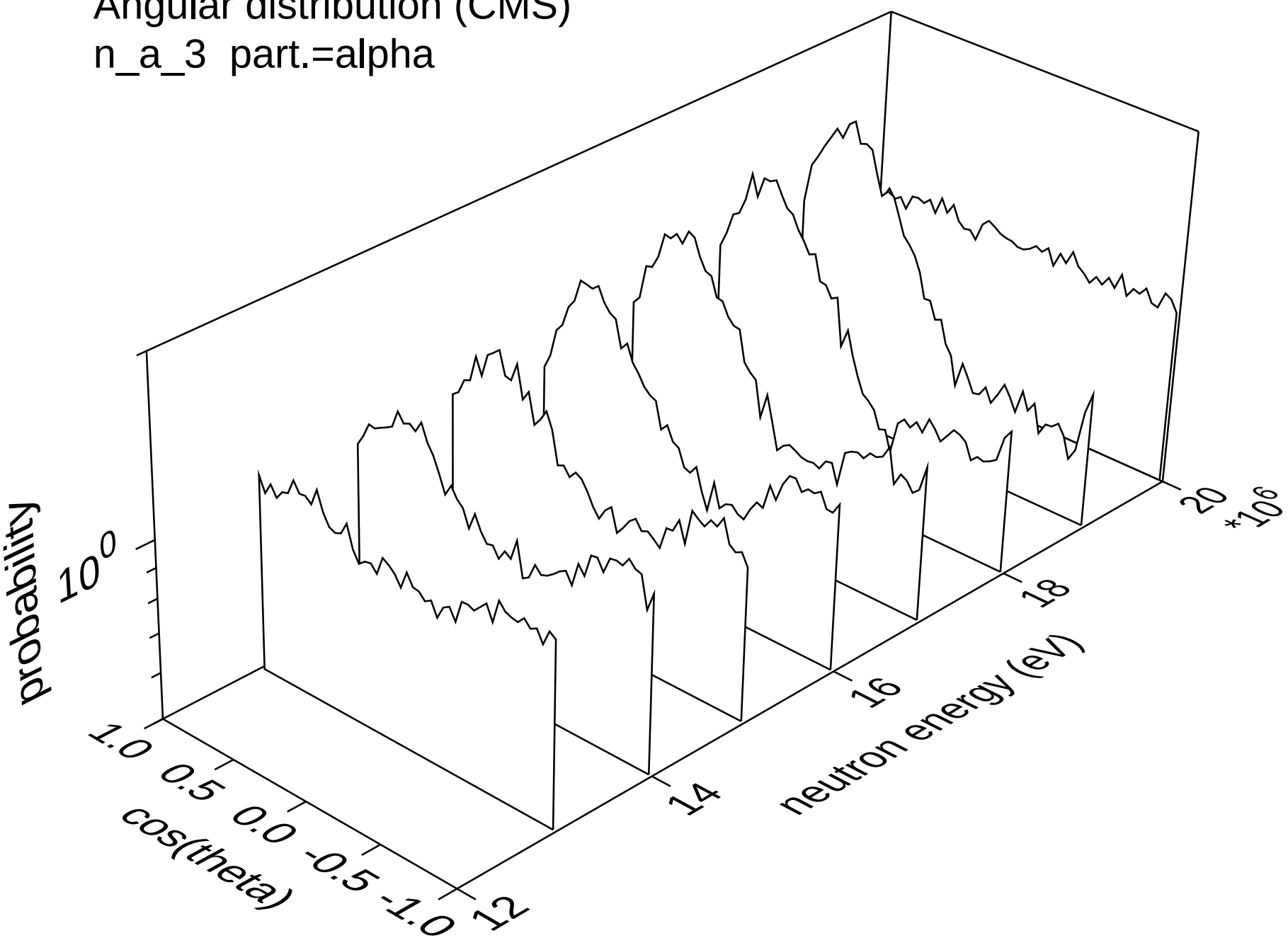

Angular distribution (CMS)
n_a_0
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
15
20
*10^6
neutron energy (eV)

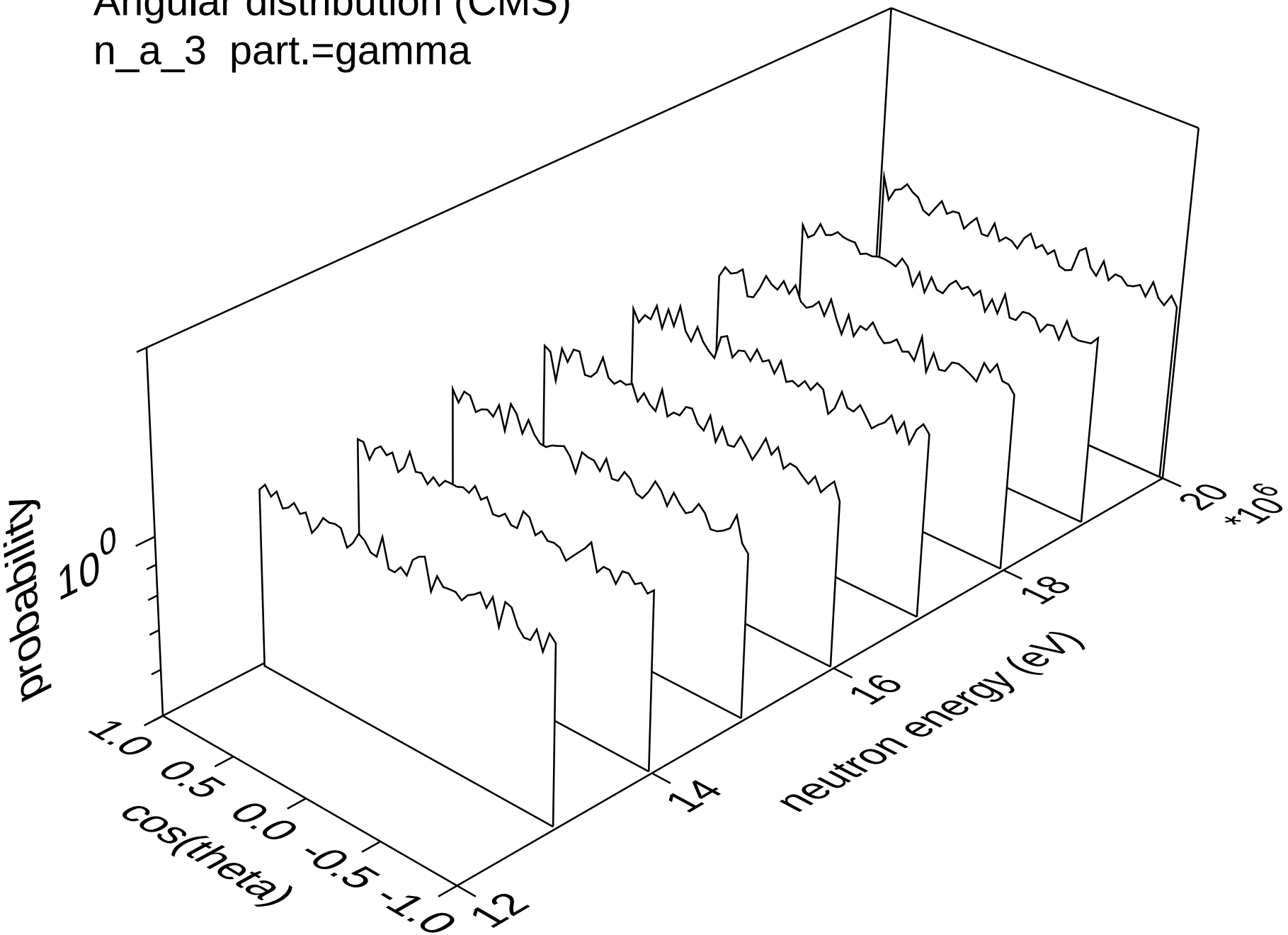

Angular distribution (CMS)
n_a_1 part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

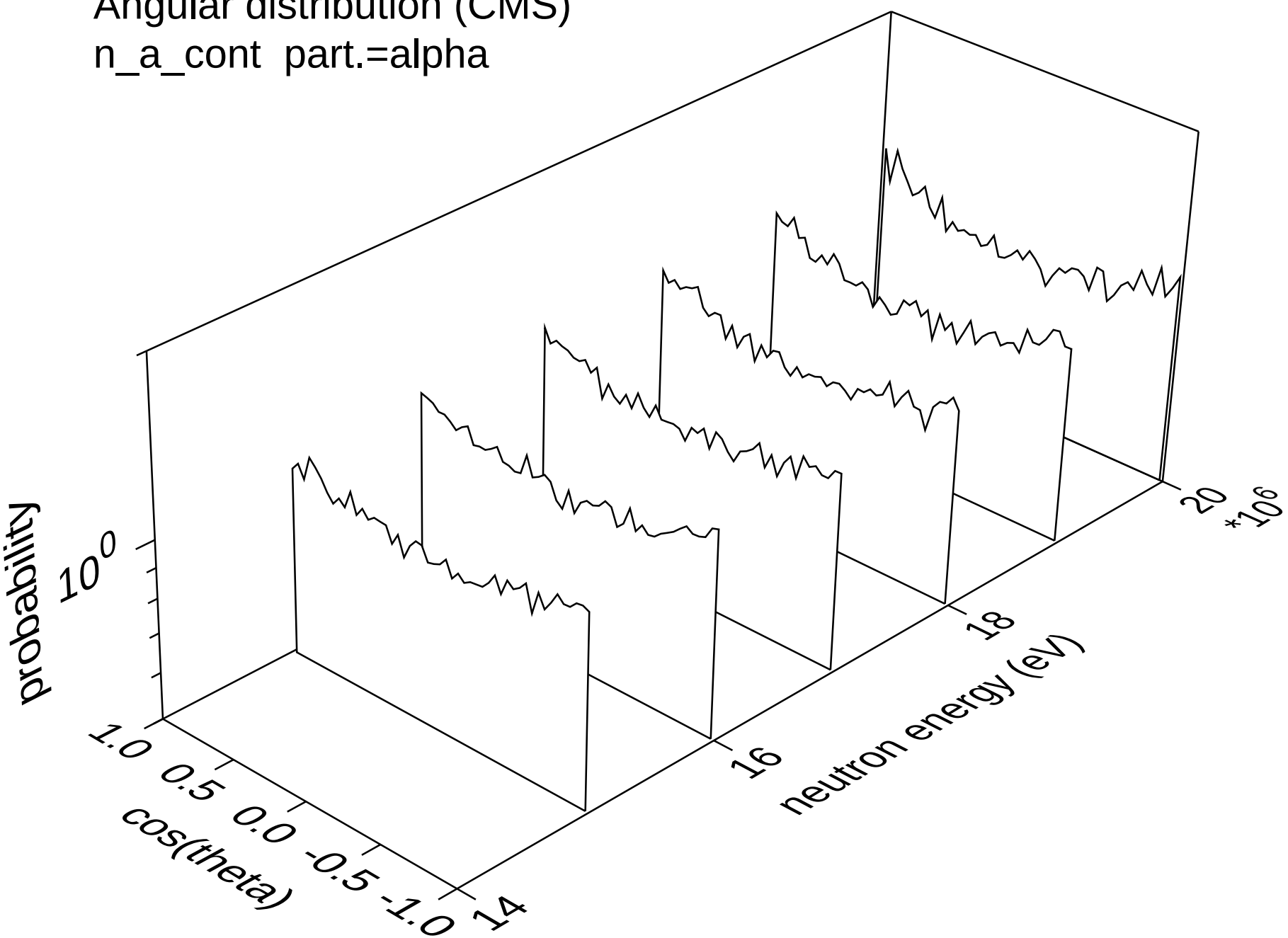

Angular distribution (CMS)
n_a_1 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
10
12
14
16
18
20
*10^6
neutron energy (eV)

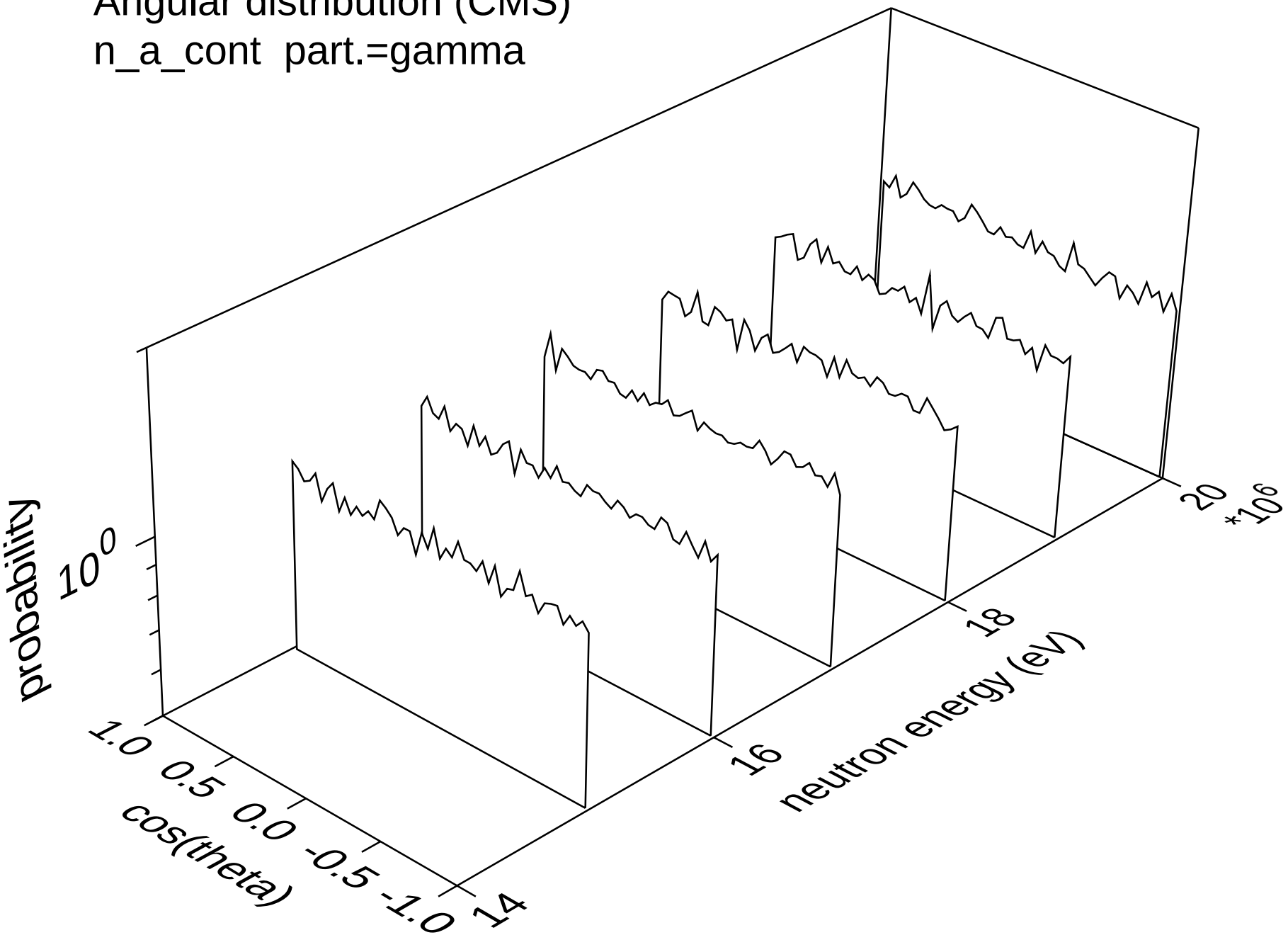

Angular distribution (CMS)
n_a_2 part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

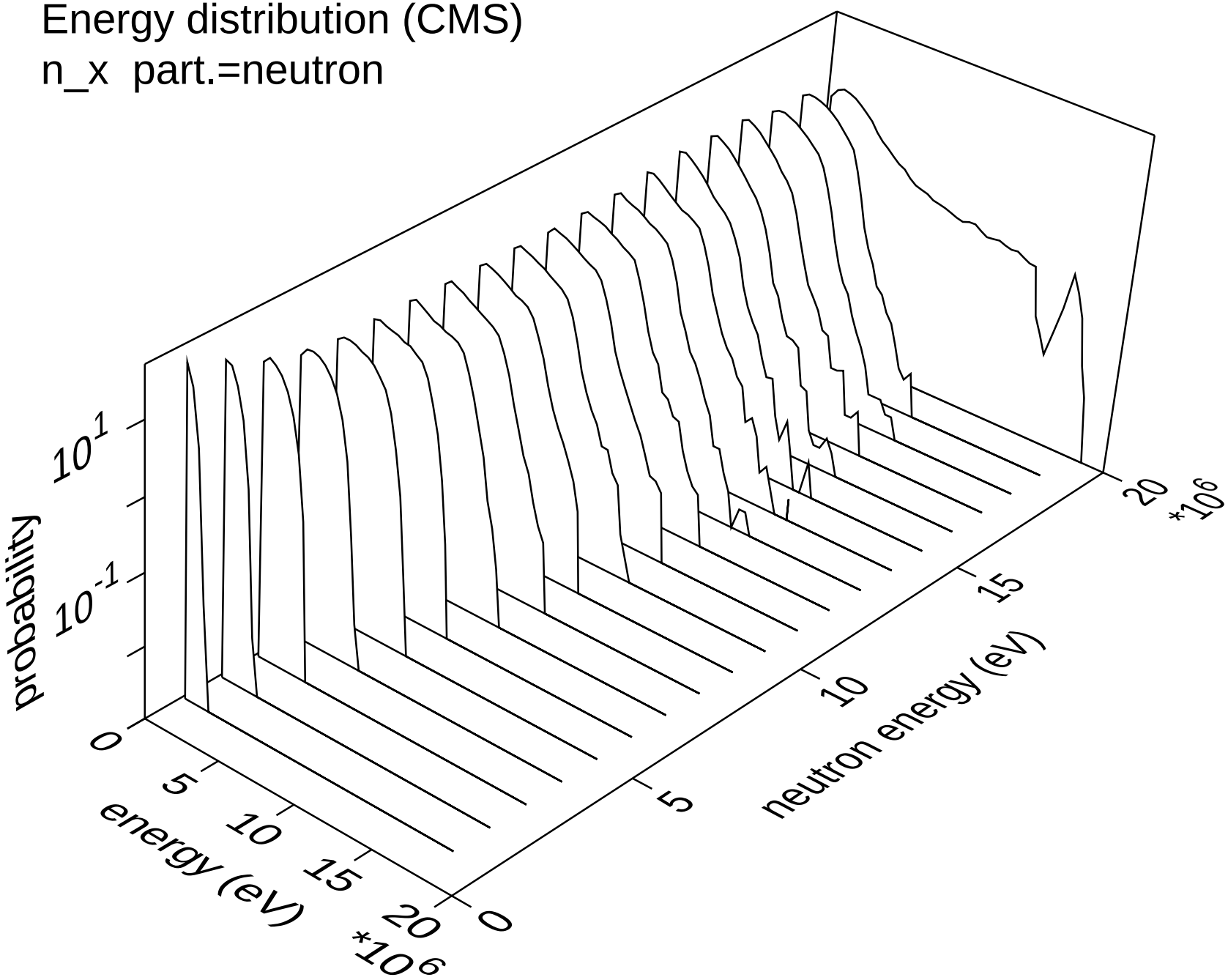

Angular distribution (CMS)
n_a_2 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

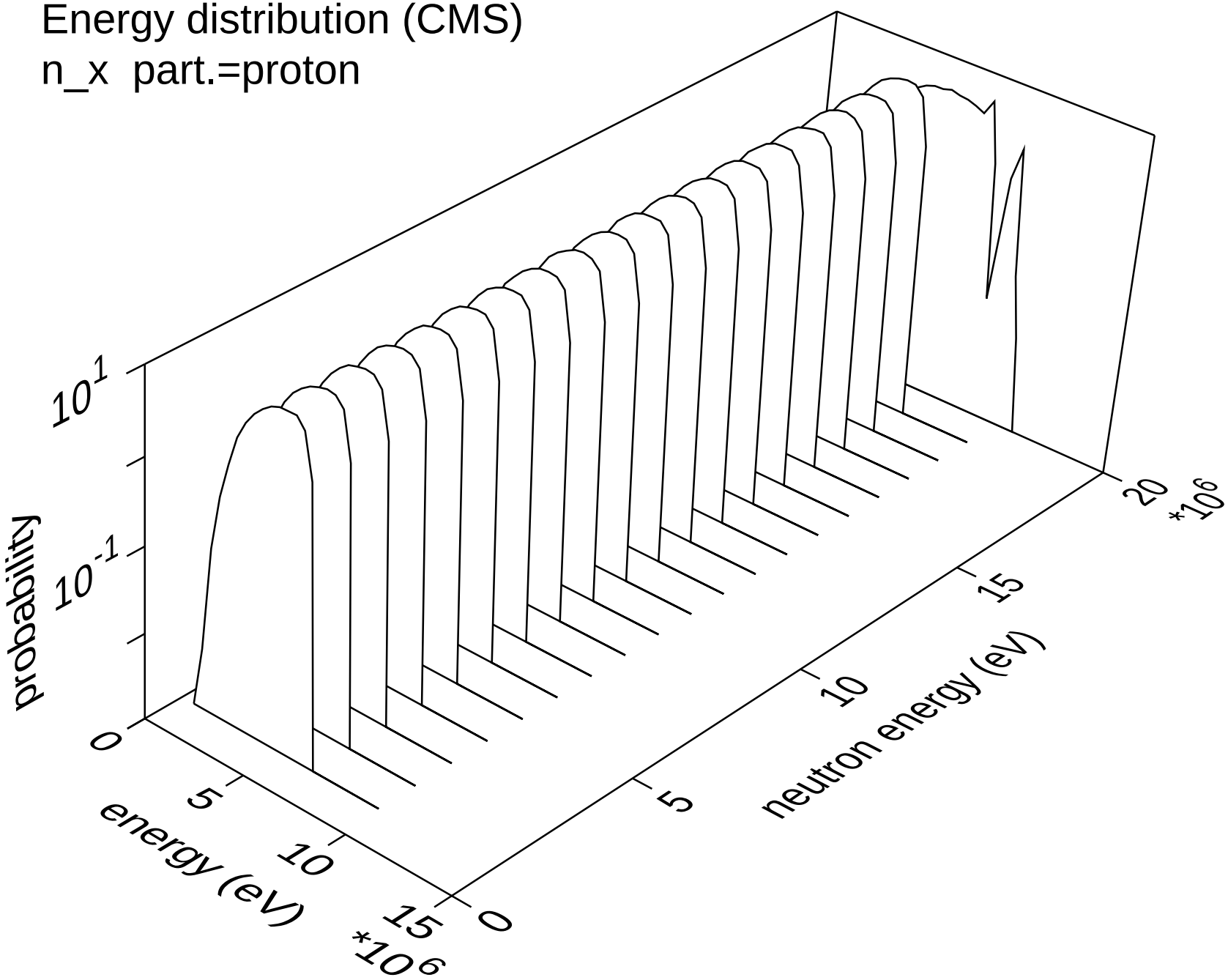

Angular distribution (CMS)
n_a_3 part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

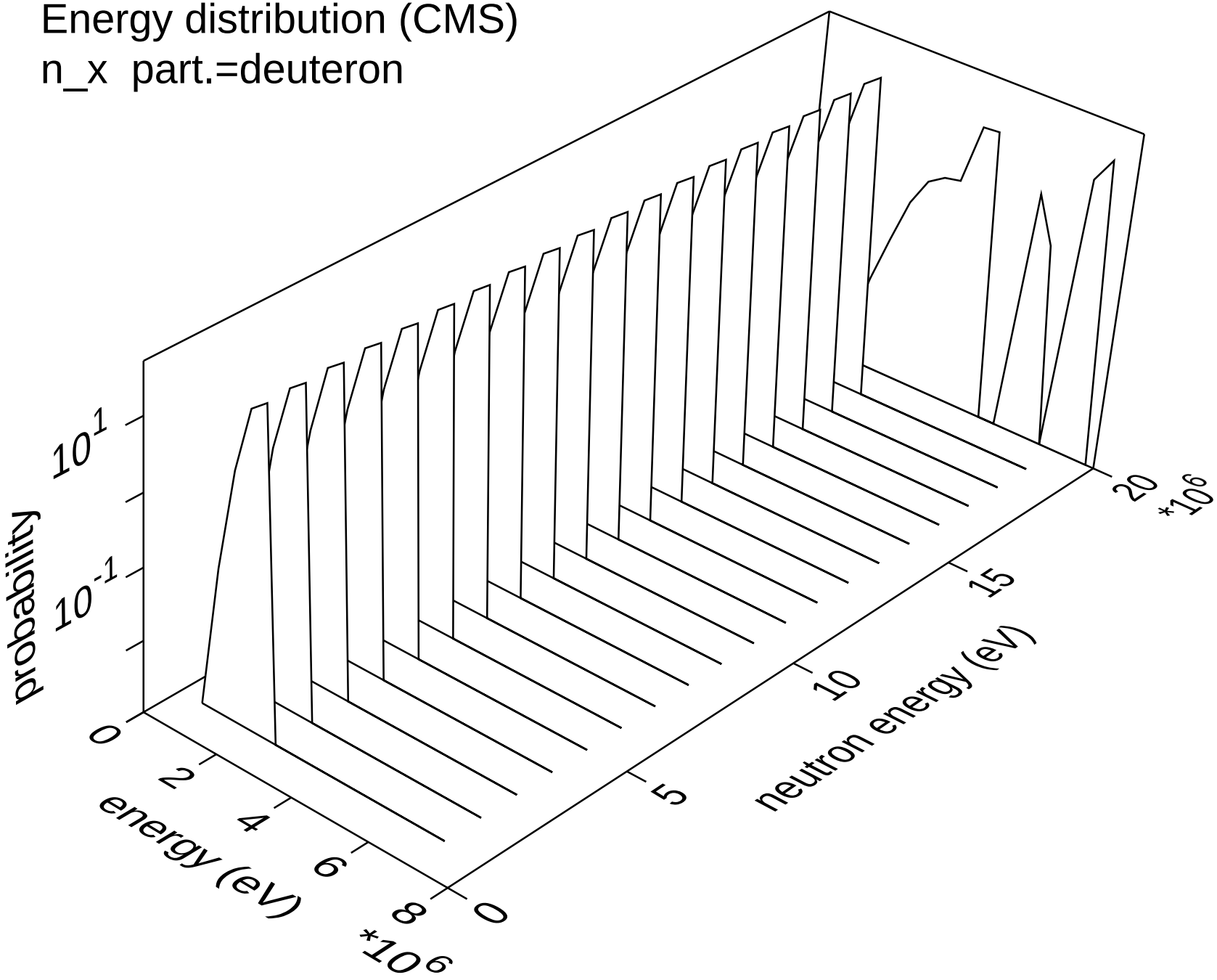

Angular distribution (CMS)
n_a_3 part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
12
14
16
18
20
*10^6
neutron energy (eV)

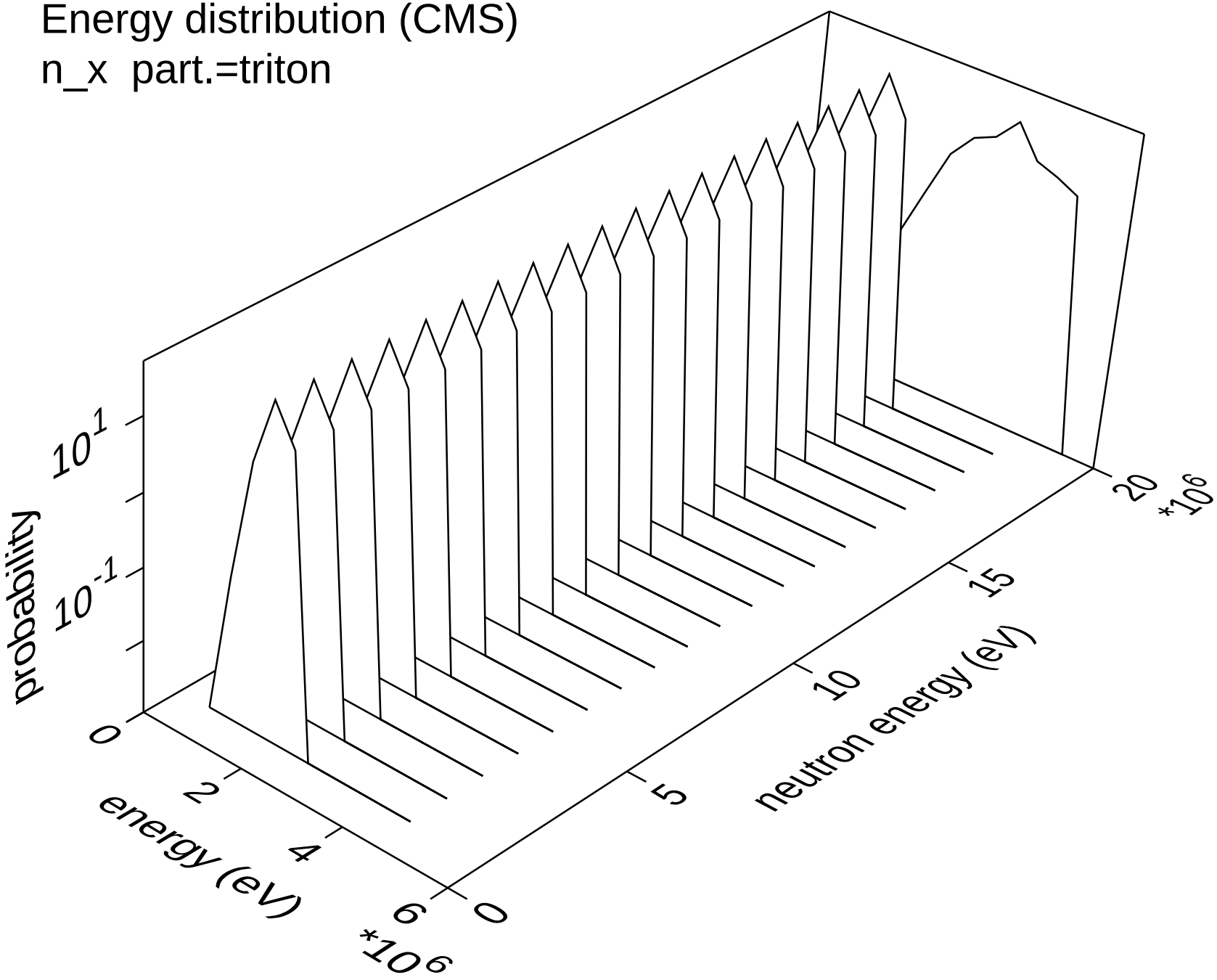

Angular distribution (CMS)
n_a_cont part.=alpha
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10^6
neutron energy (eV)

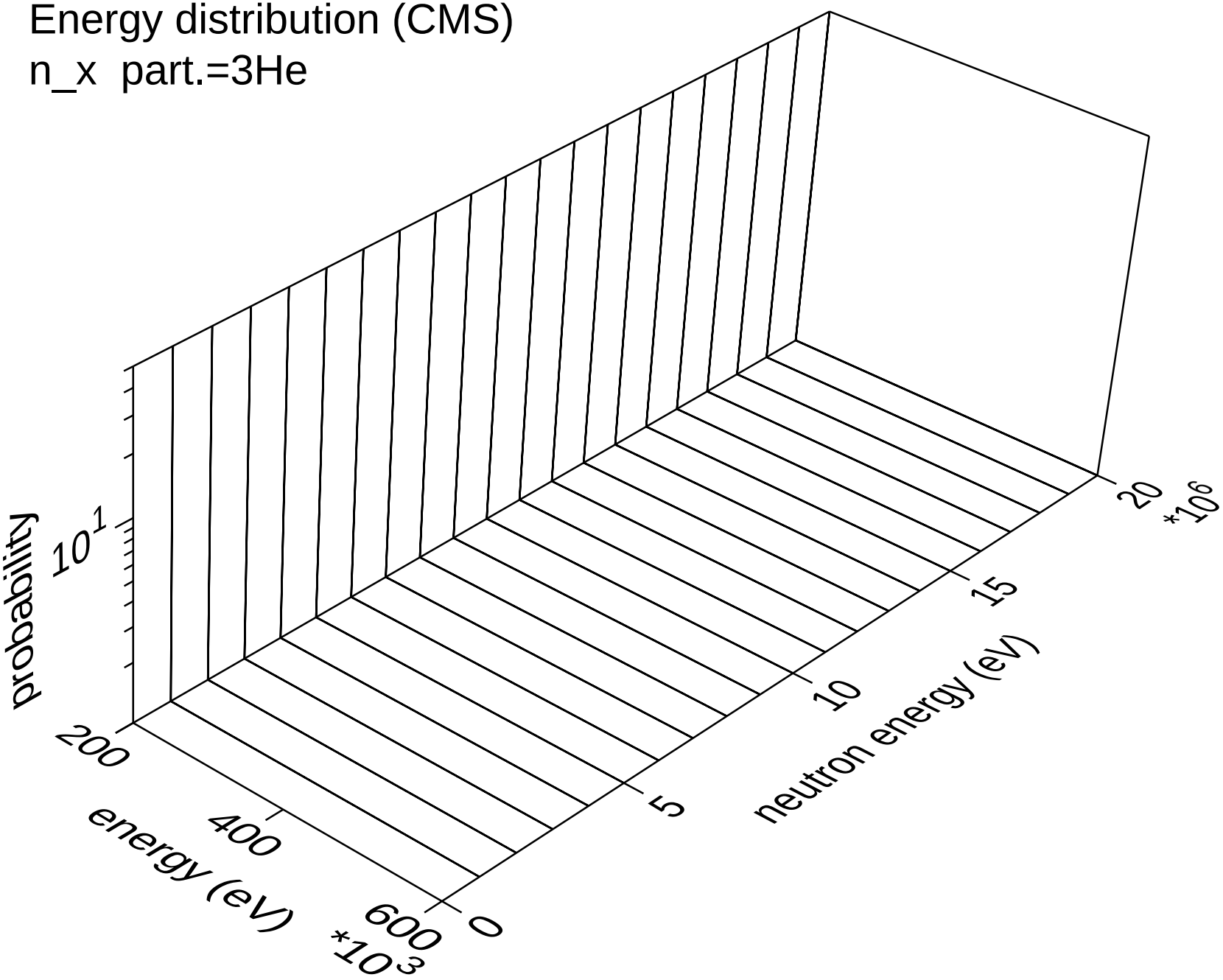

Angular distribution (CMS)
n_a_cont part.=gamma
probability
10^0
1.0
0.5
0.0
-0.5
-1.0
cos(theta)
14
16
18
20
*10⁶
neutron energy (eV)

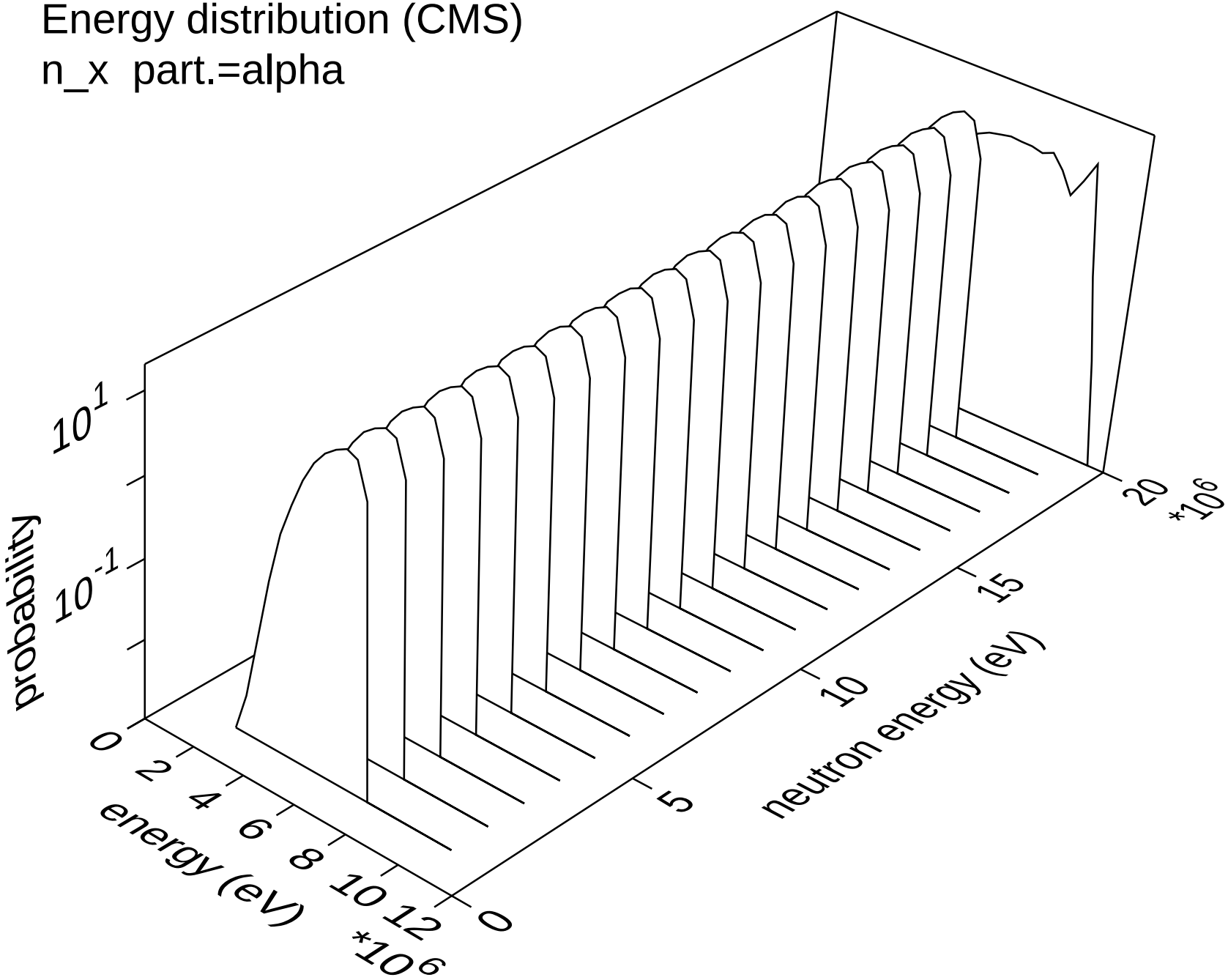

Energy distribution (CMS)
n_x part.=neutron
probability
10^{1}
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

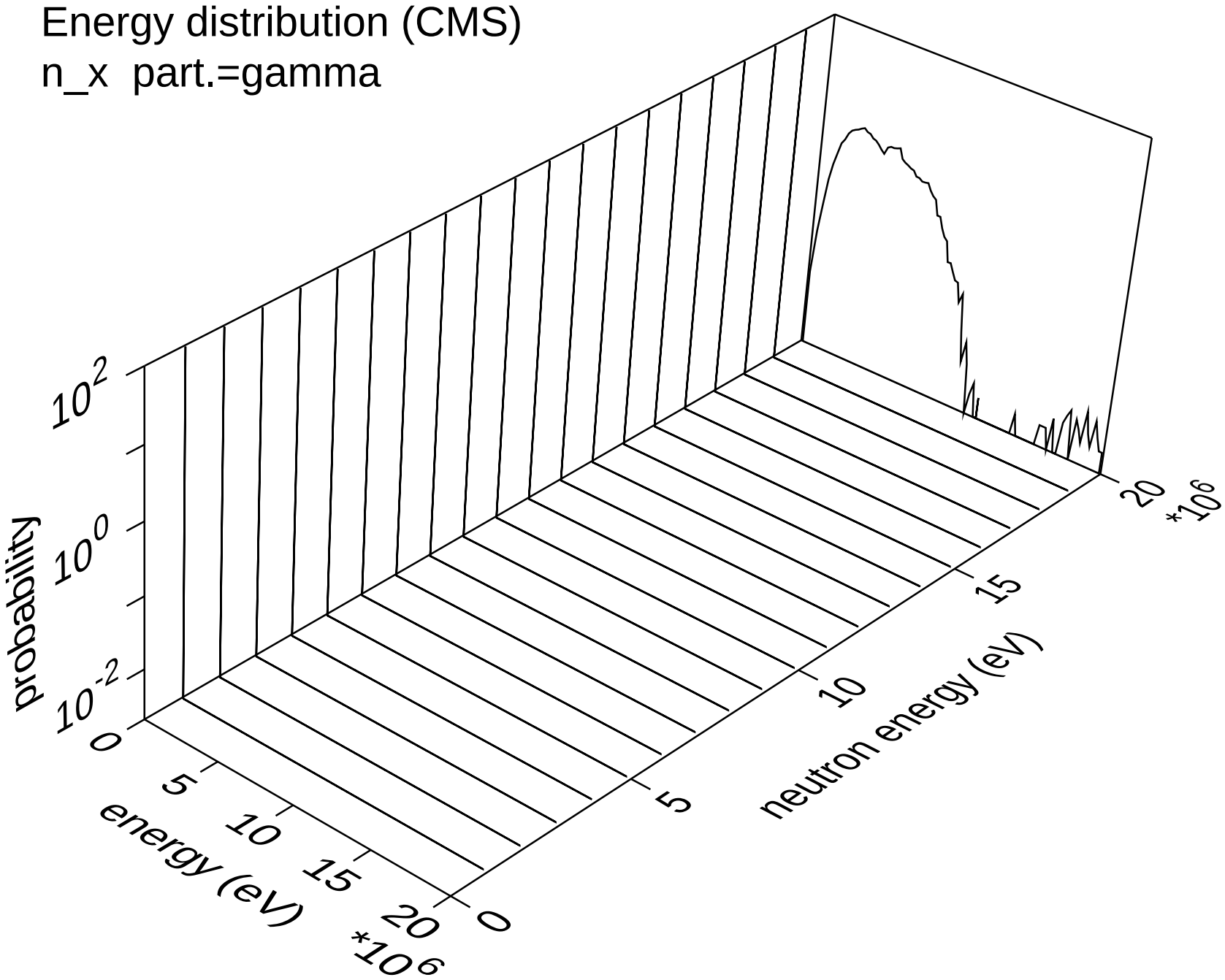

Energy distribution (CMS)
n_x part.=proton
probability
10^{1}
10^{-1}
0
5
10
15
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

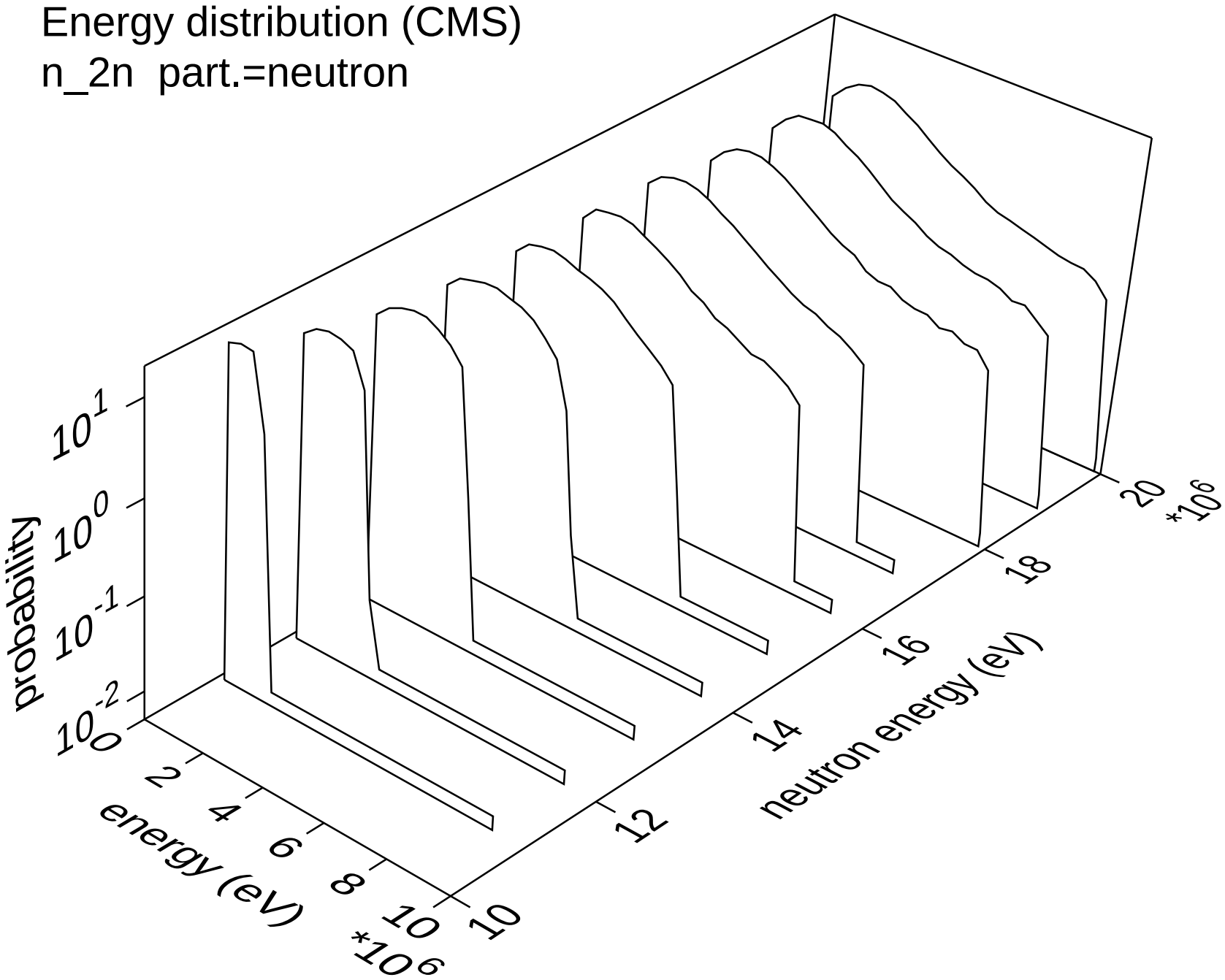

Energy distribution (CMS)
n_x part.=deuteron
probability
10^{1}
10^{-1}
0
2
4
6
8
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

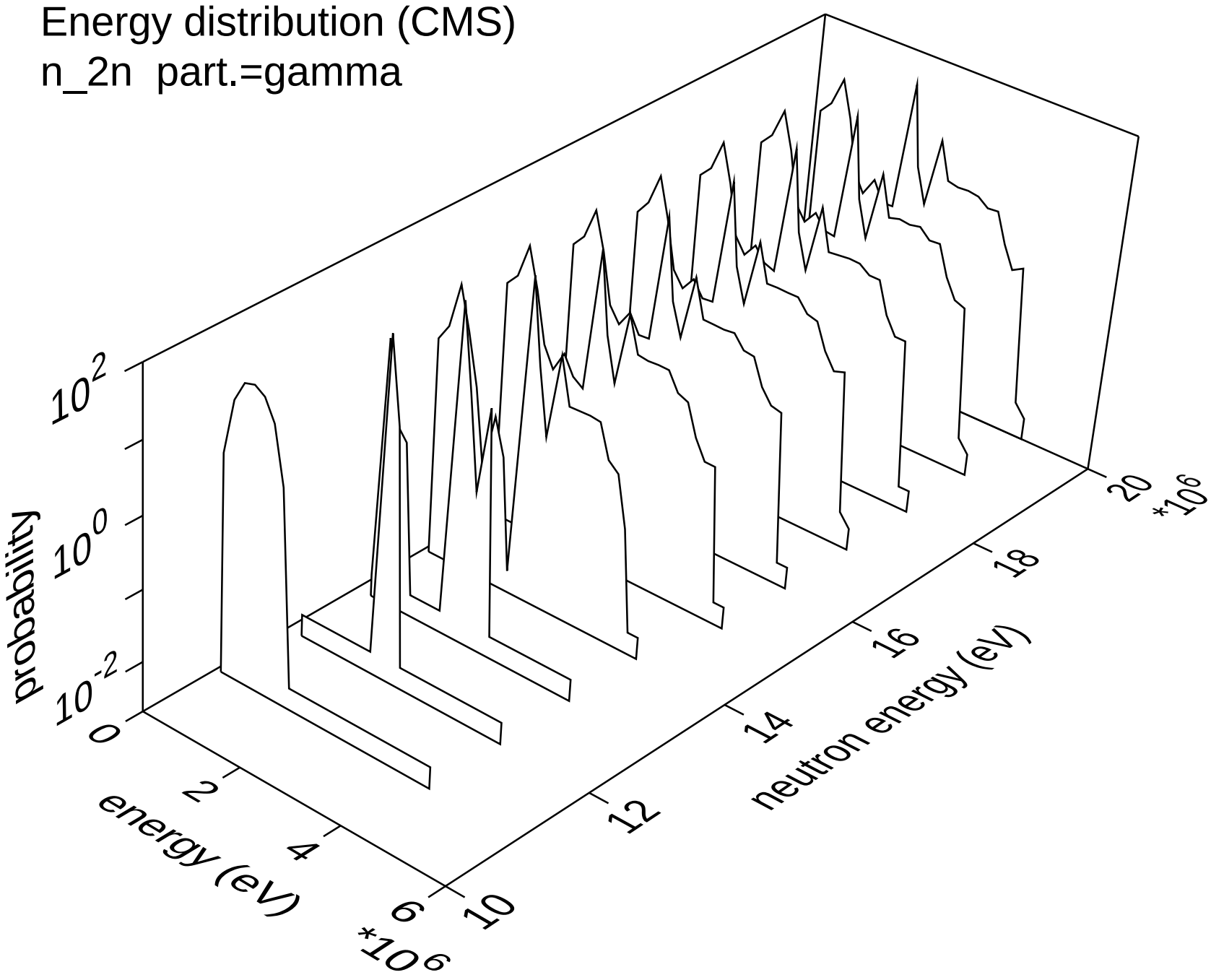

Energy distribution (CMS)
n_x part.=triton
probability
10^{1}
10^{-1}
0
2
4
6
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

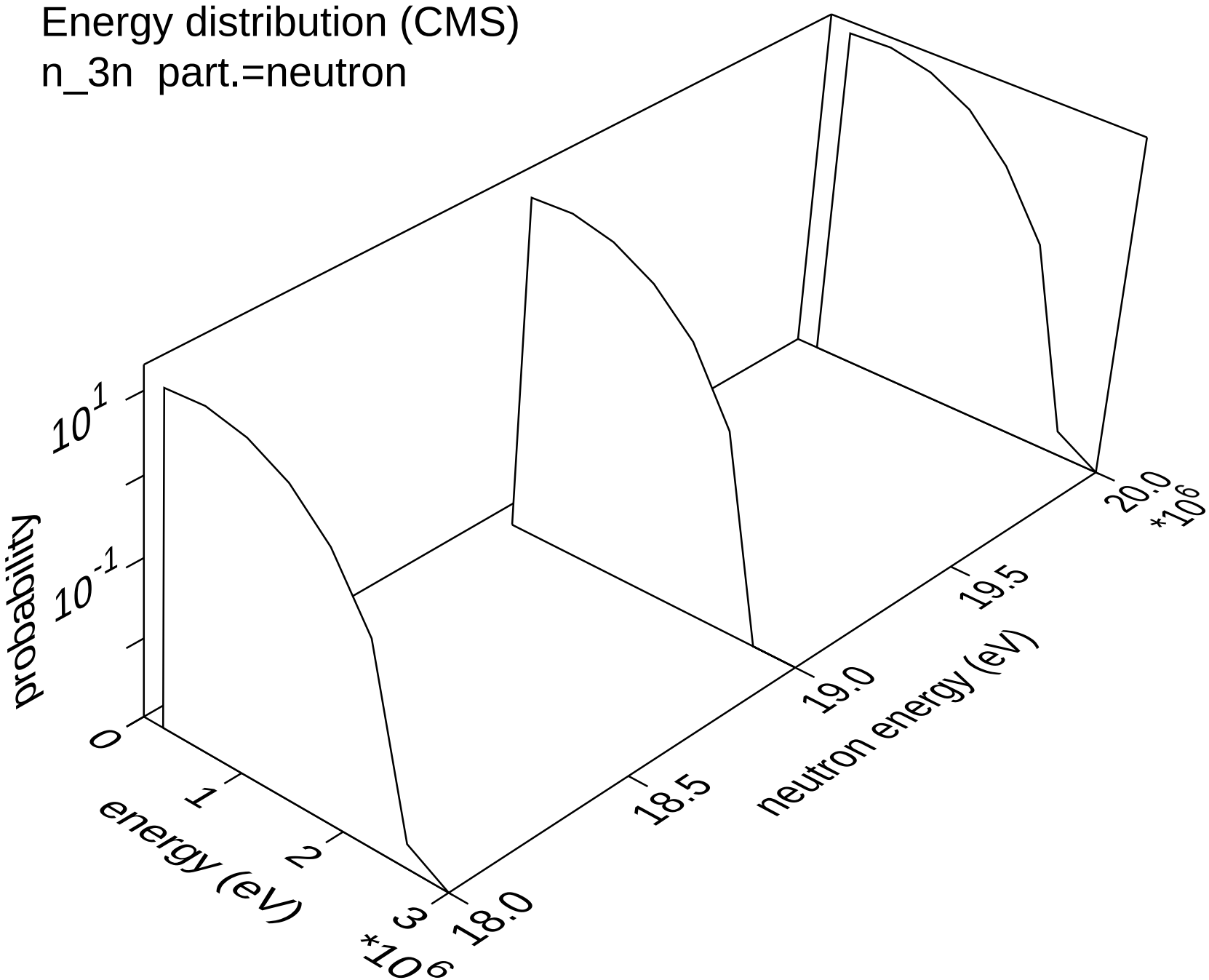

Energy distribution (CMS)
n_x part.=3He
probability
10^{-1}
200
400
600
0
energy (eV)
*10^3
5
10
15
20
neutron energy (eV)
*10^6

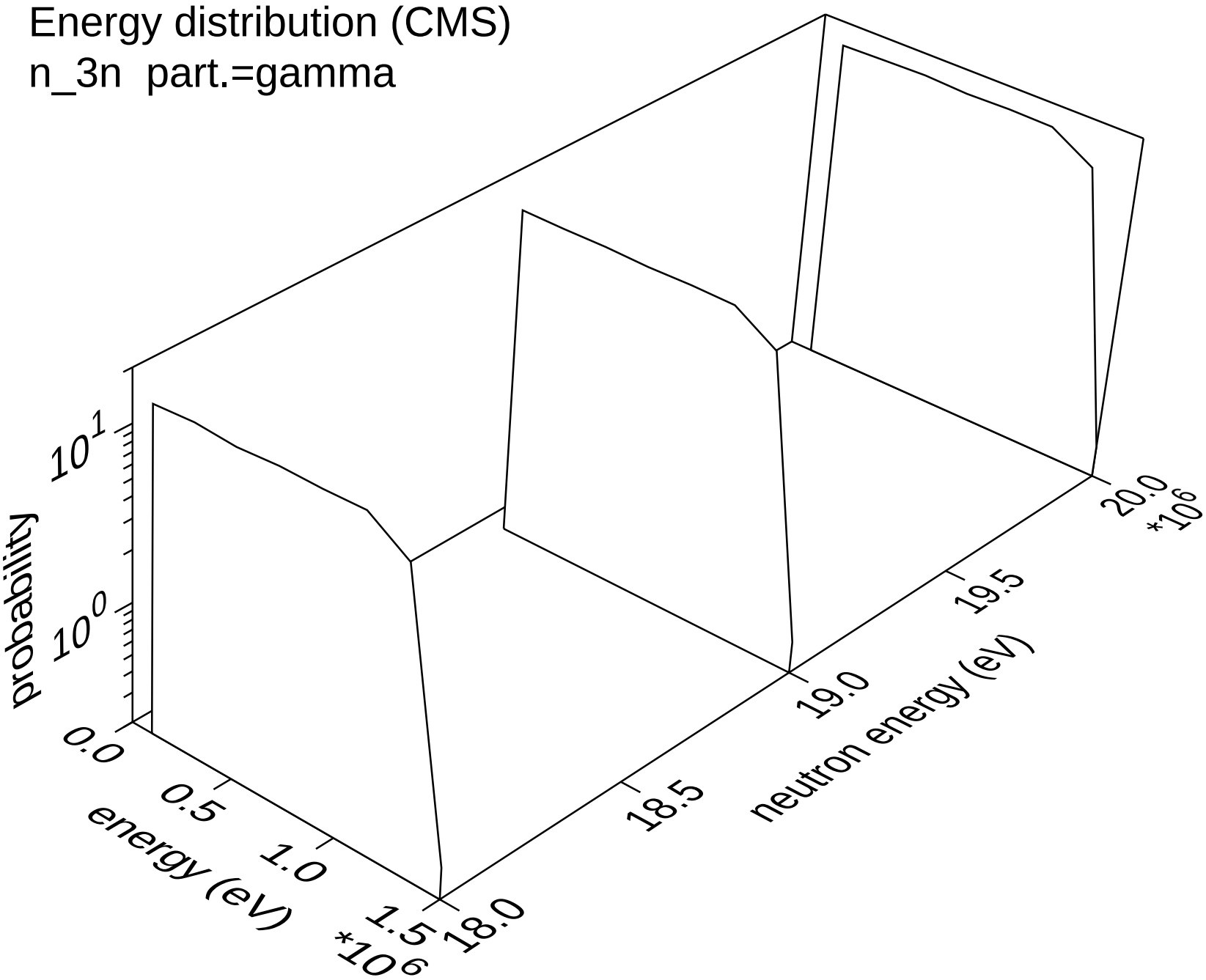

Energy distribution (CMS)
n_x part.=alpha
probability
10^{1}
10^{-1}
0
2
4
6
8
10
12
*10 6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

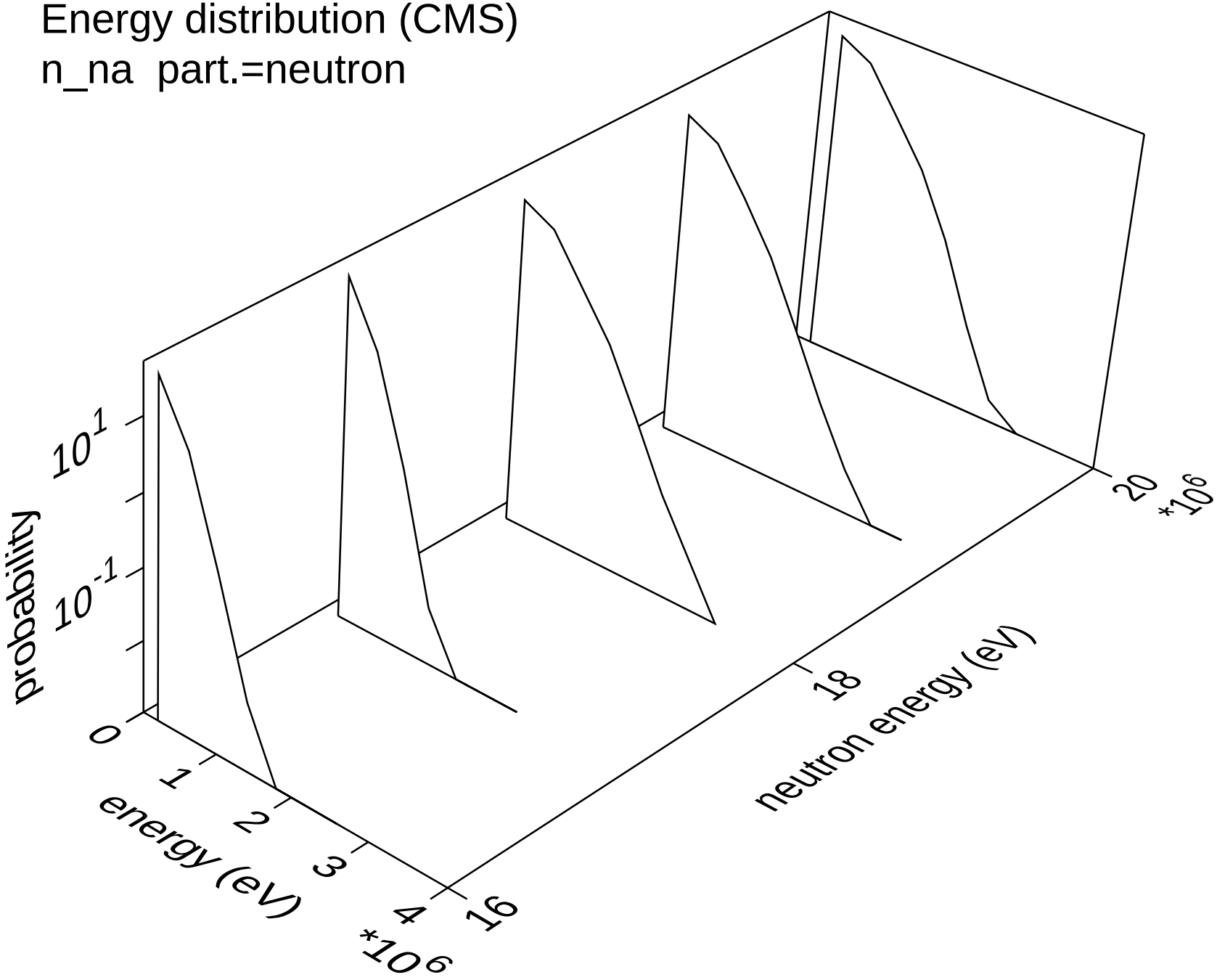

Energy distribution (CMS)
n_x part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

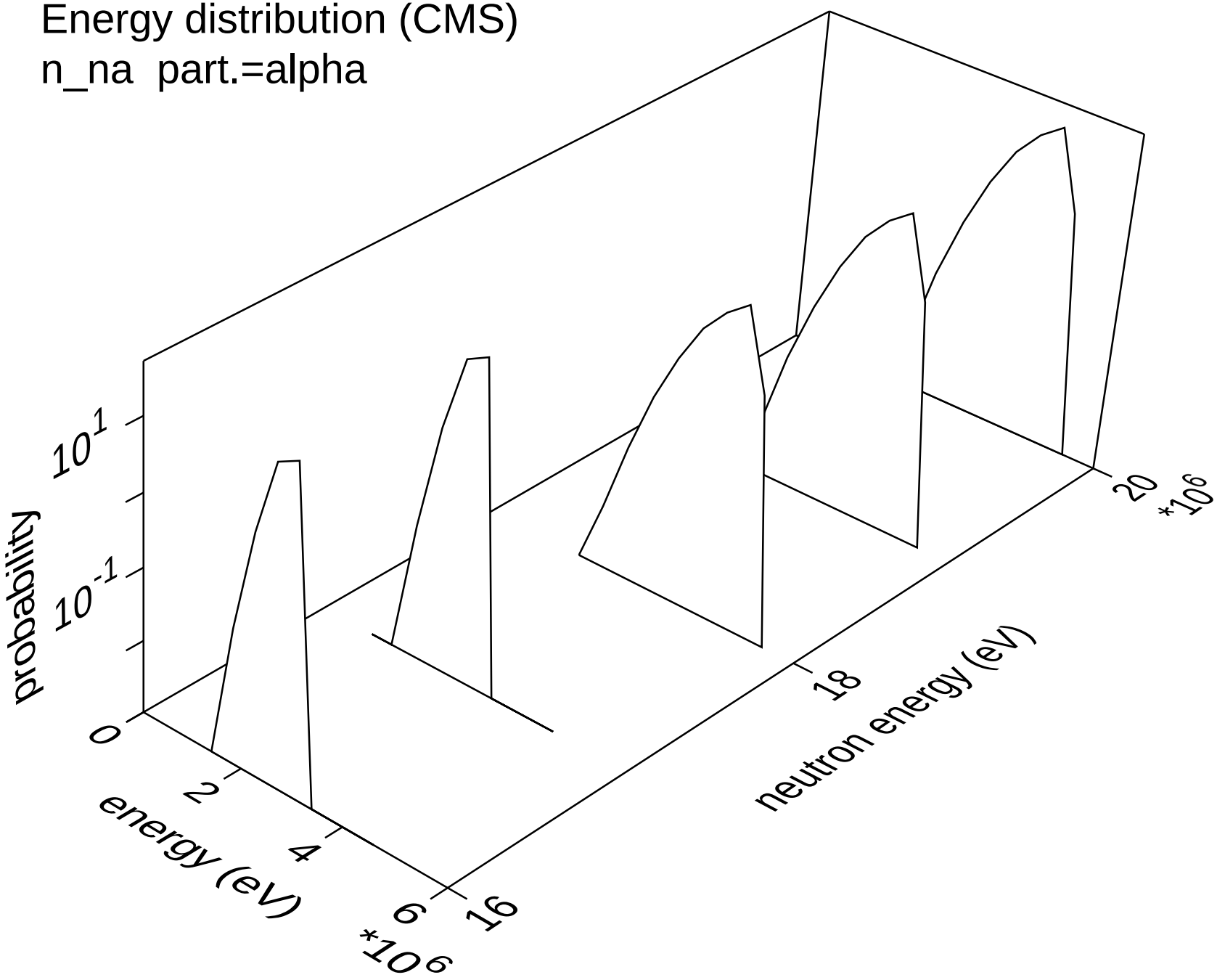

Energy distribution (CMS)
n_2n part.=neutron
probability
10^{1}
10^{0}
10^{-1}
10^{-2}
0
2
4
6
8
10
energy (eV)
*10^6
10
12
14
16
18
20
neutron energy (eV)
*10^6

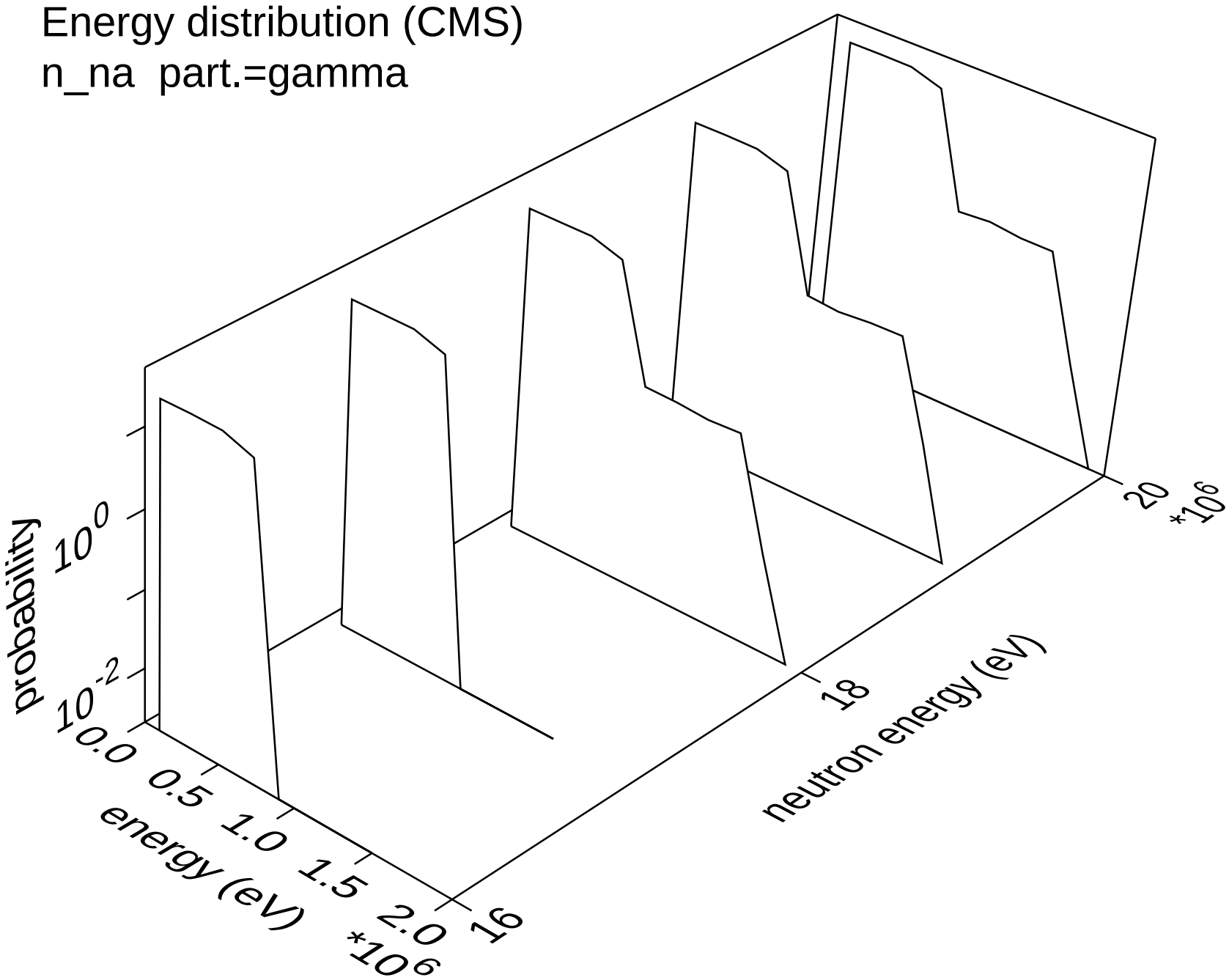

Energy distribution (CMS)
n_2n part.=gamma
probability
10^{2}
10^{0}
10^{-2}
0
2
4
6
*10^6
energy (eV)
10
12
14
16
18
20
*10^6
neutron energy (eV)

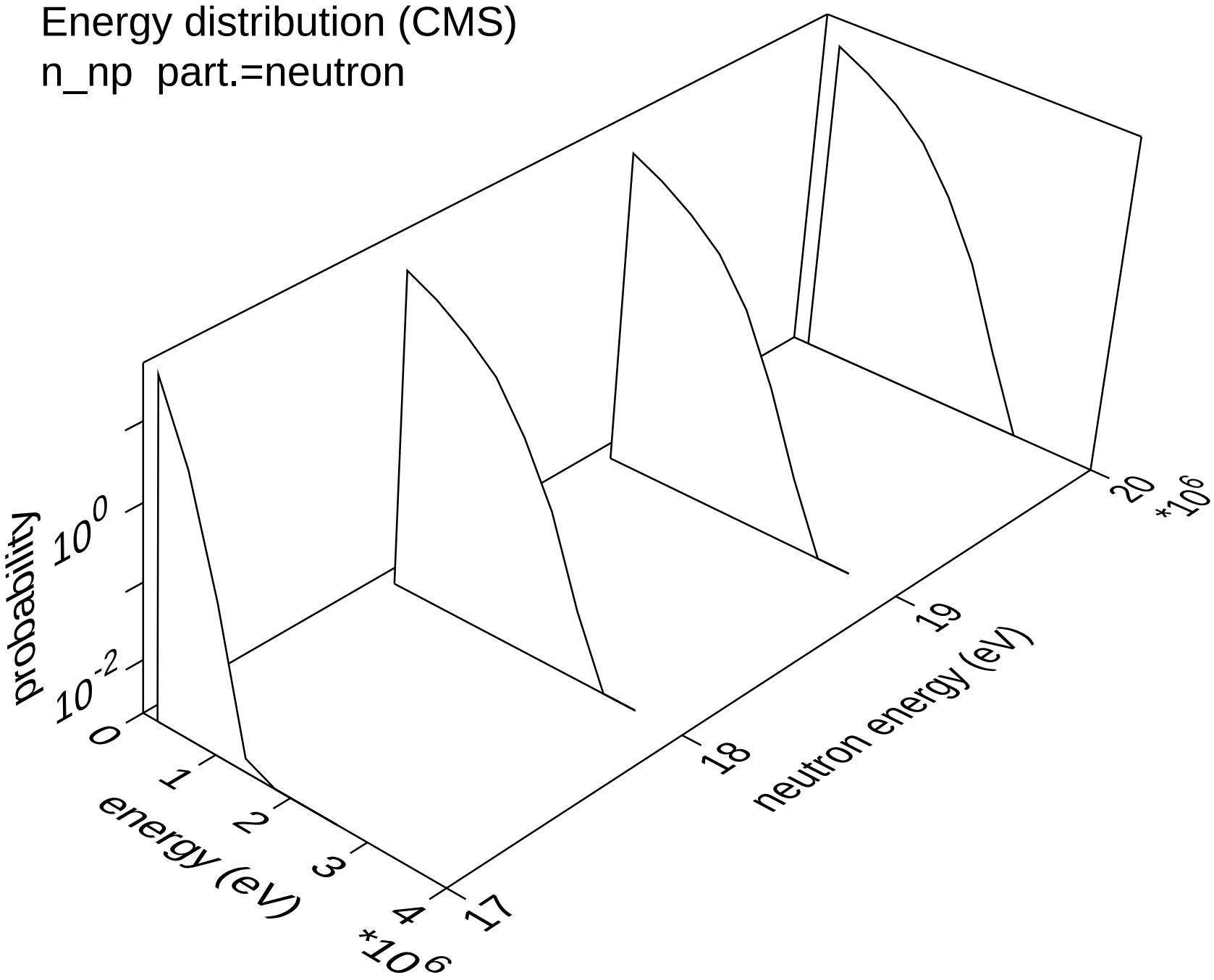

Energy distribution (CMS)
n_3n part.=neutron
probability
10^{1}
10^{-1}
0
energy (eV)
1
2
3
*10 6
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

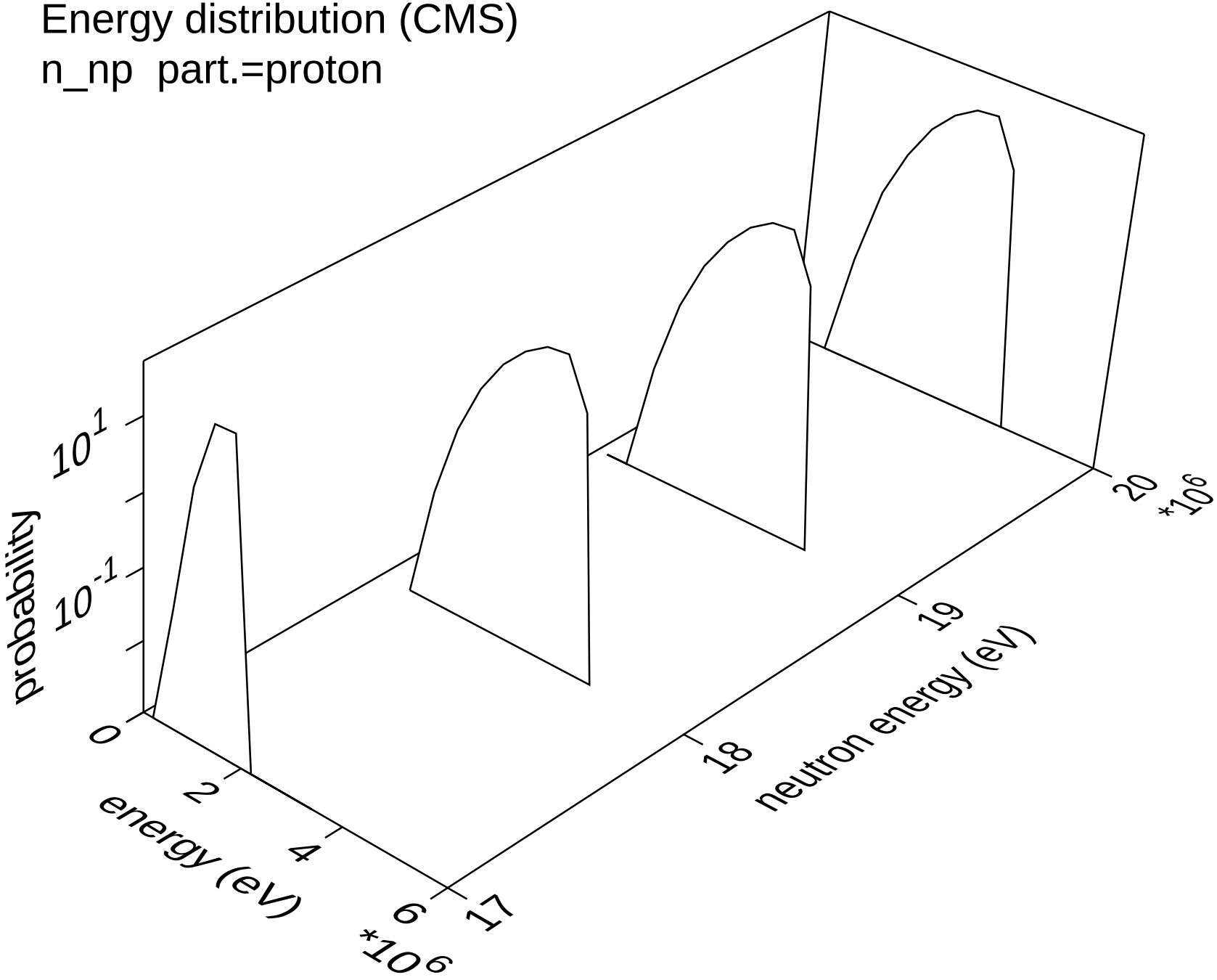

Energy distribution (CMS)
n_3n part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

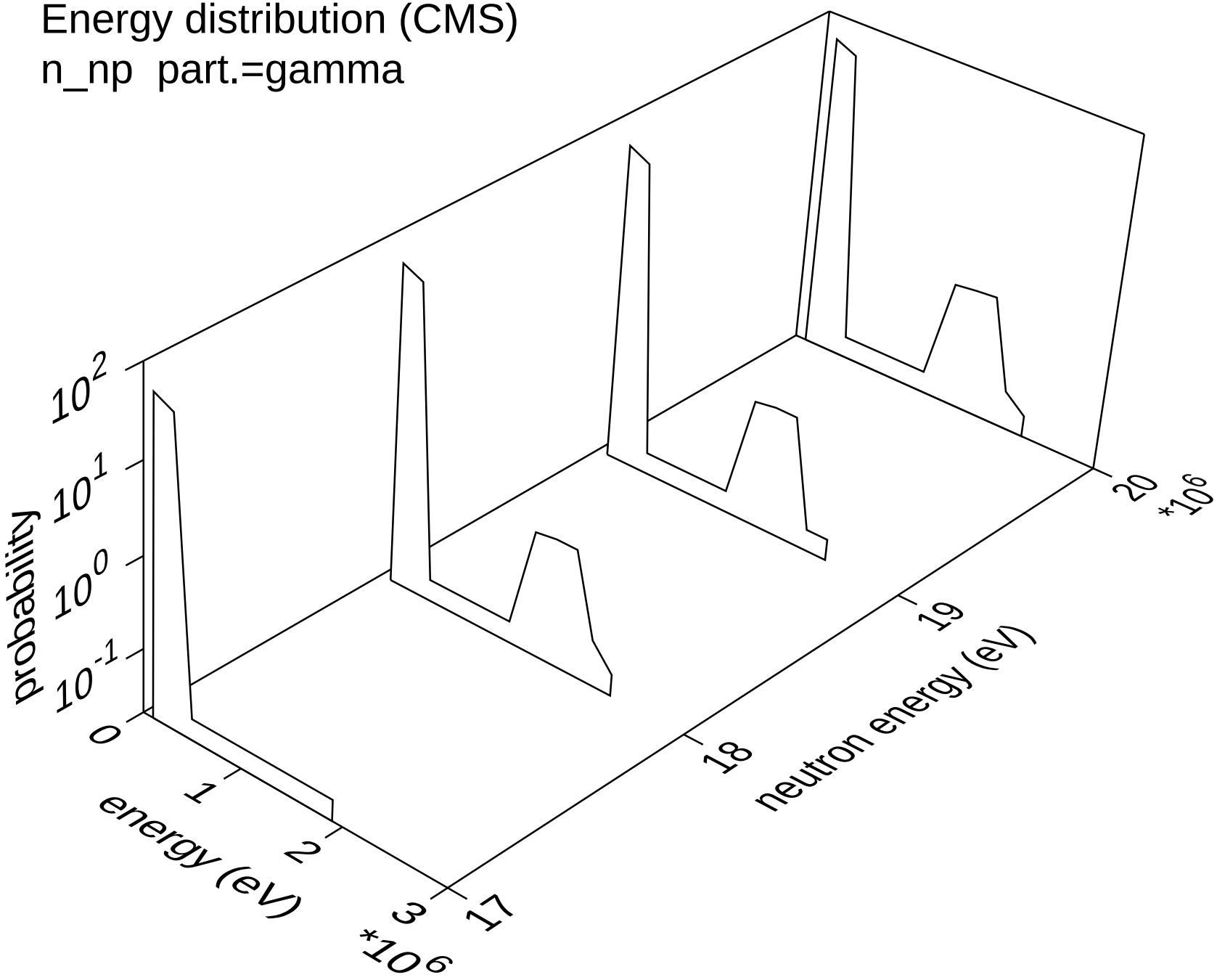

Energy distribution (CMS)
n_na part.=neutron
probability
10^{1}
10^{-1}
0
1
2
3
4
*10 6
energy (eV)
16
18
20
*10^6
neutron energy (eV)

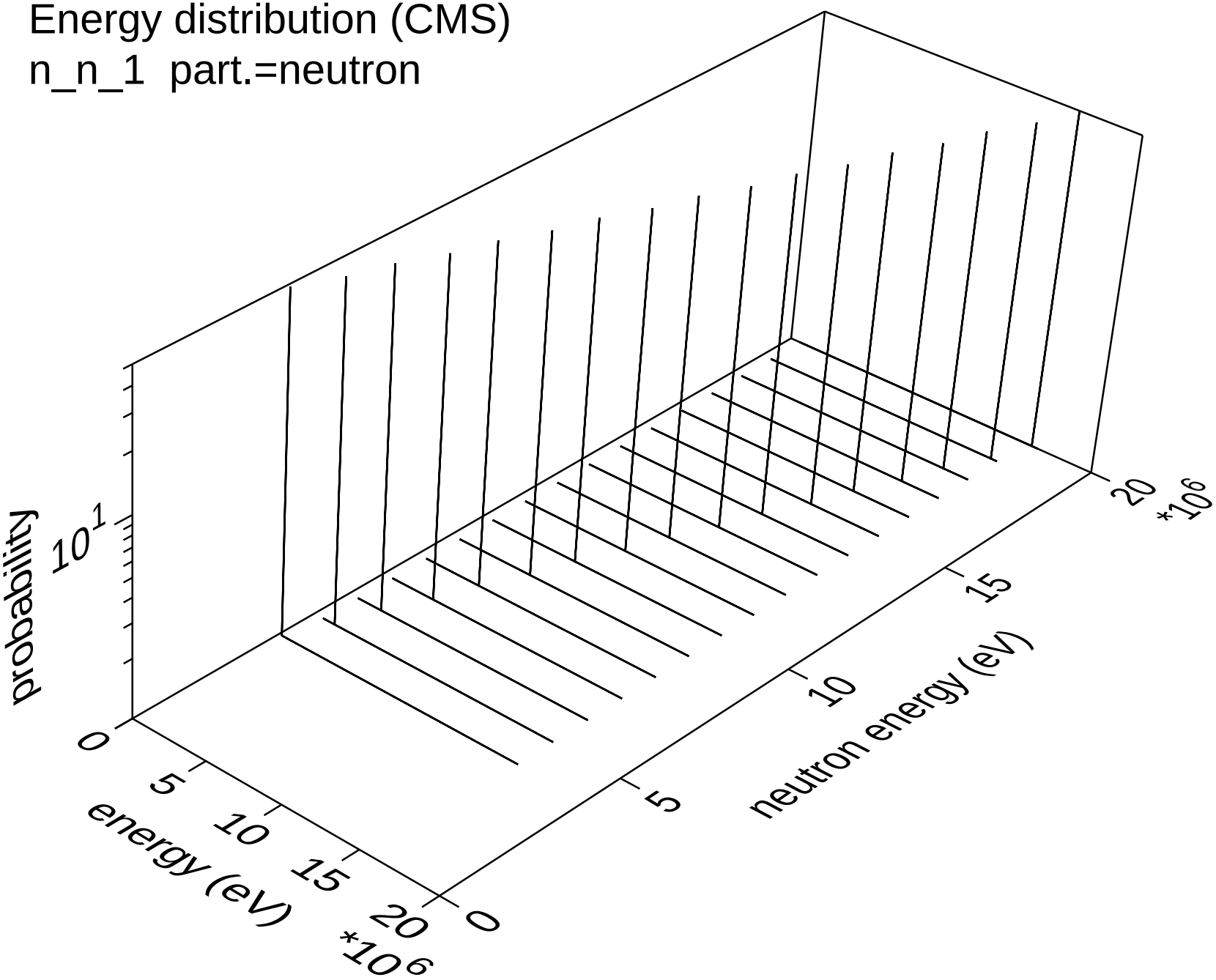

Energy distribution (CMS)
n_na part.=alpha
probability
10^{1}
10^{-1}
0
2
4
6
*10^6
energy (eV)
16
18
20
*10^6
neutron energy (eV)

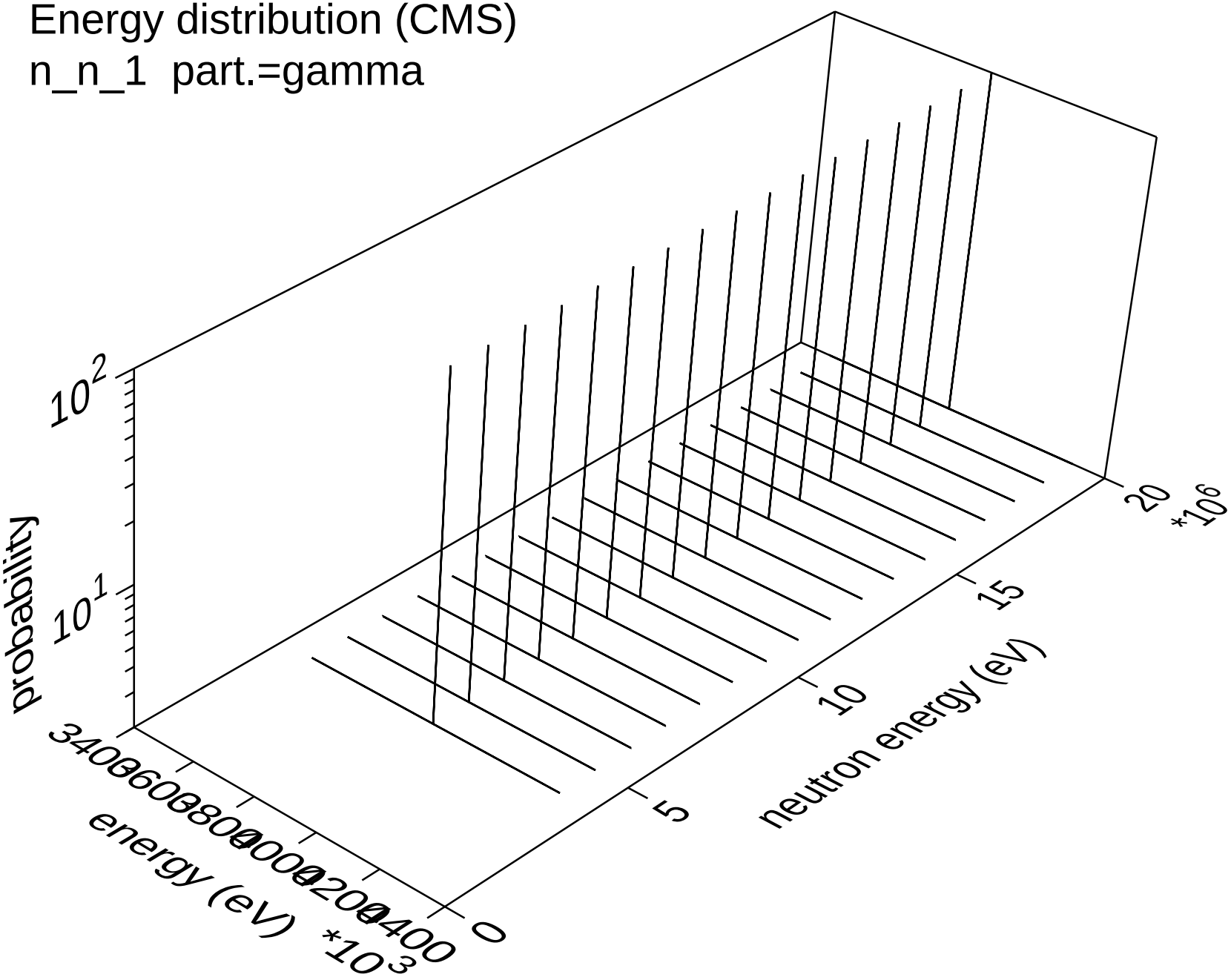

Energy distribution (CMS)
n_na part.=gamma
probability
10^0
10^{-2}
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
16
18
20
*10^6
neutron energy (eV)

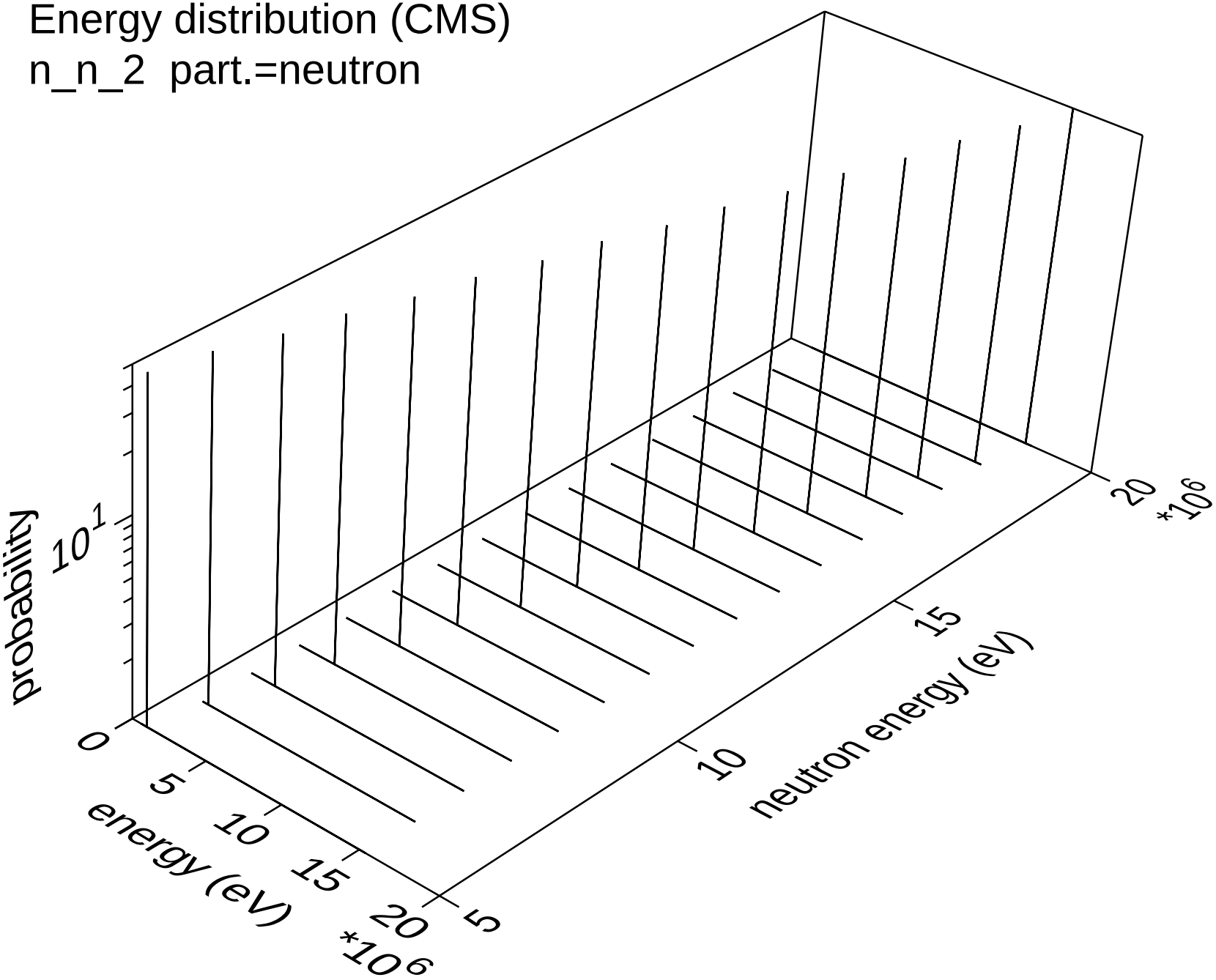

Energy distribution (CMS)
n_np part.=neutron
probability
10^0
10^{-2}
0
1
2
3
4
*10 6
energy (eV)
17
18
19
20
*10^6
neutron energy (eV)

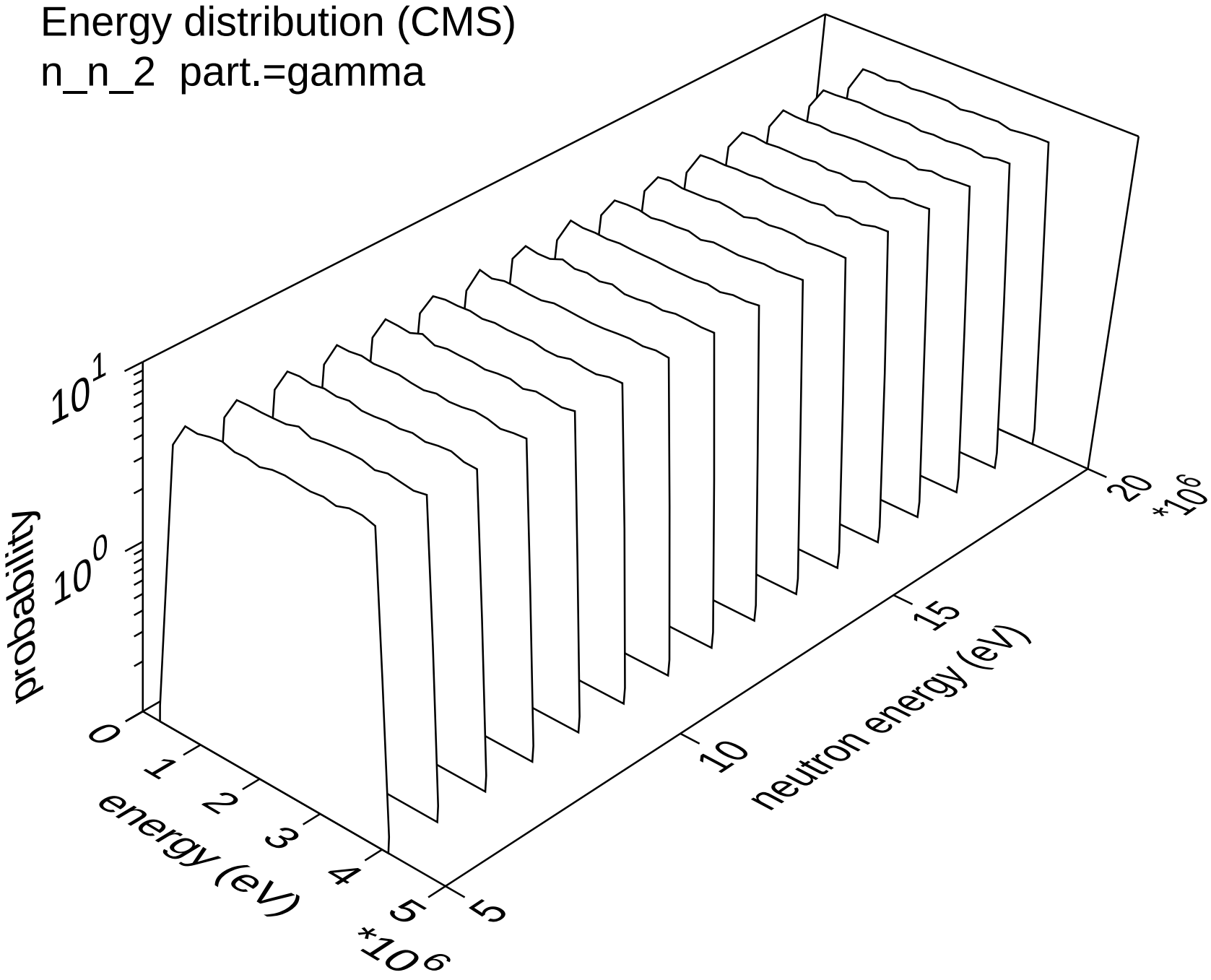

Energy distribution (CMS)
n_np part.=proton
probability
10^{1}
10^{-1}
0
2
4
6
*10^6
energy (eV)
17
18
19
20
*10^6
neutron energy (eV)

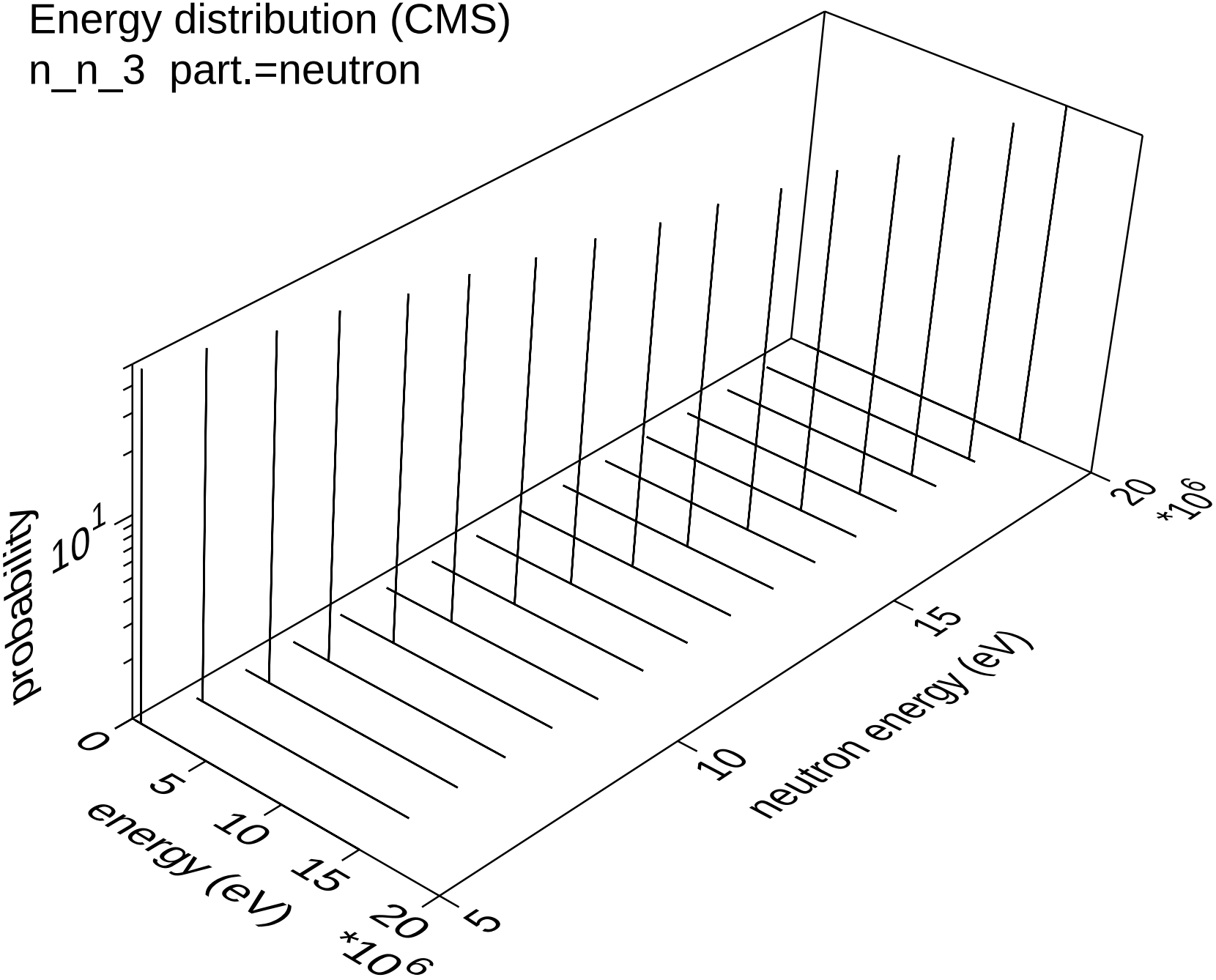

Energy distribution (CMS)
n_np part.=gamma
probability
10^{2}
10^{1}
10^{0}
10^{-1}
0
1
2
3
*10 6
energy (eV)
17
18
19
20
*10^6
neutron energy (eV)

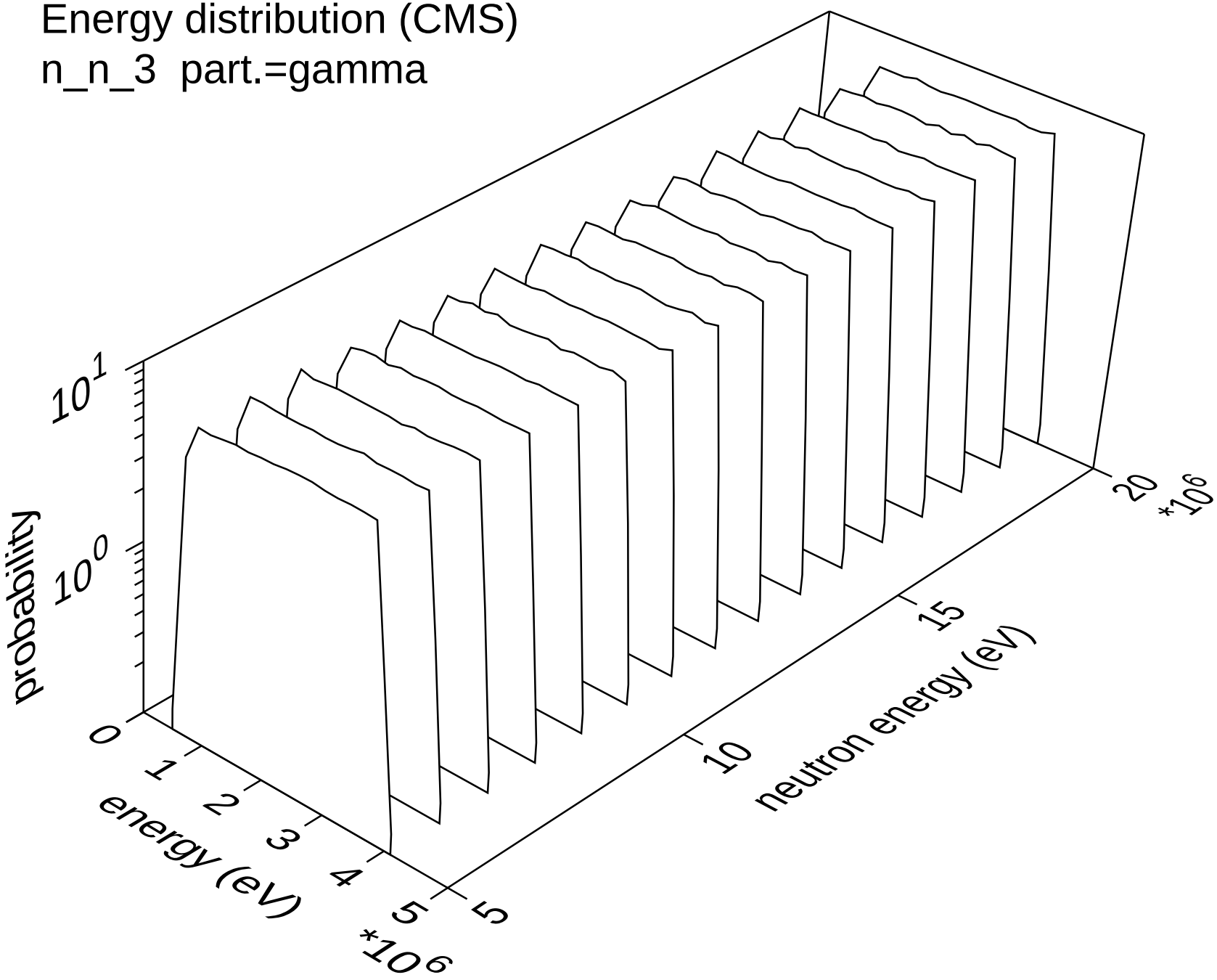

Energy distribution (CMS)
n_n_1 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
0
5
10
15
20
*10^6
neutron energy (eV)

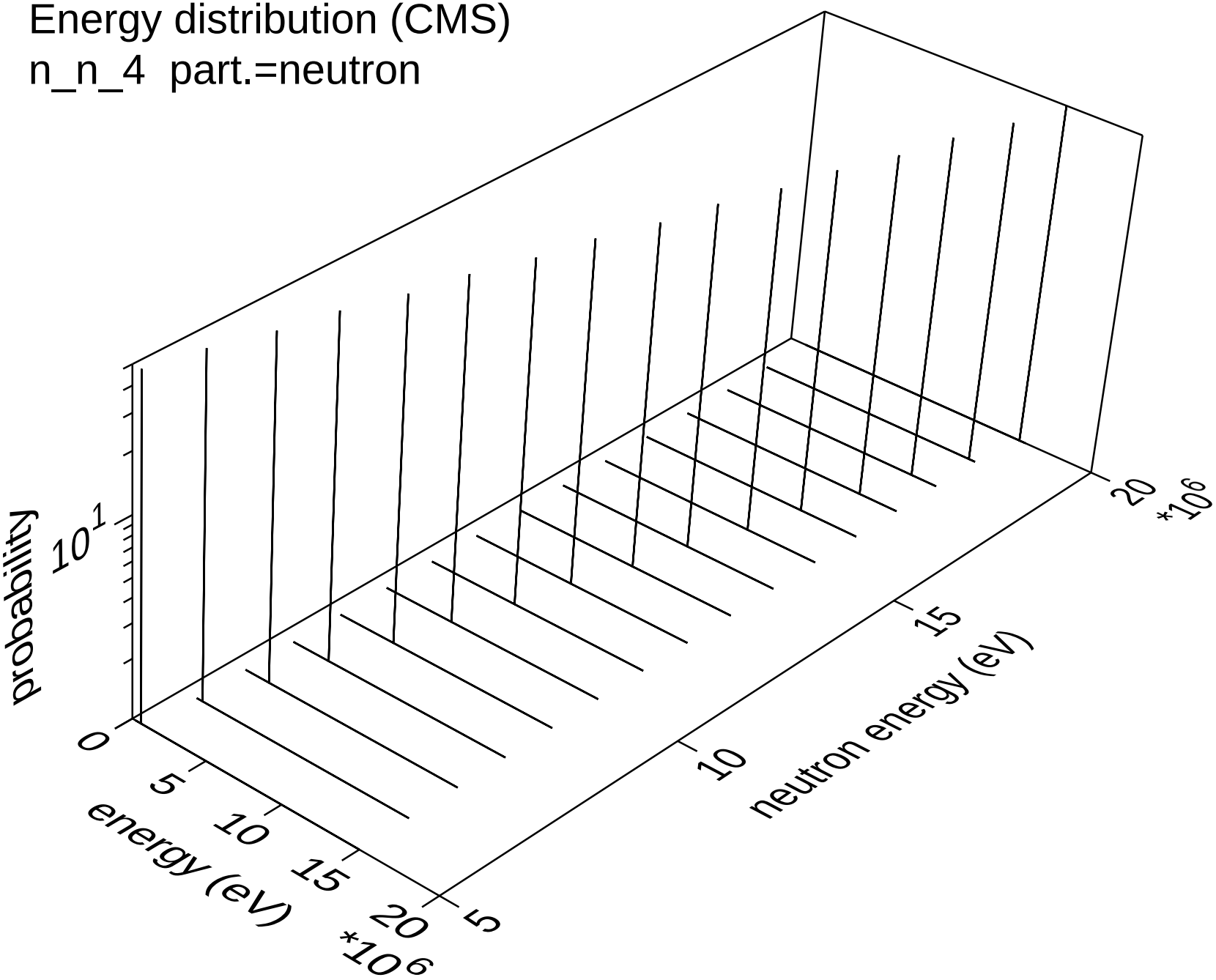

Energy distribution (CMS)
n_n_1 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
0
200
400
600
800
neutron energy (eV)
5
10
15
20
*10^6

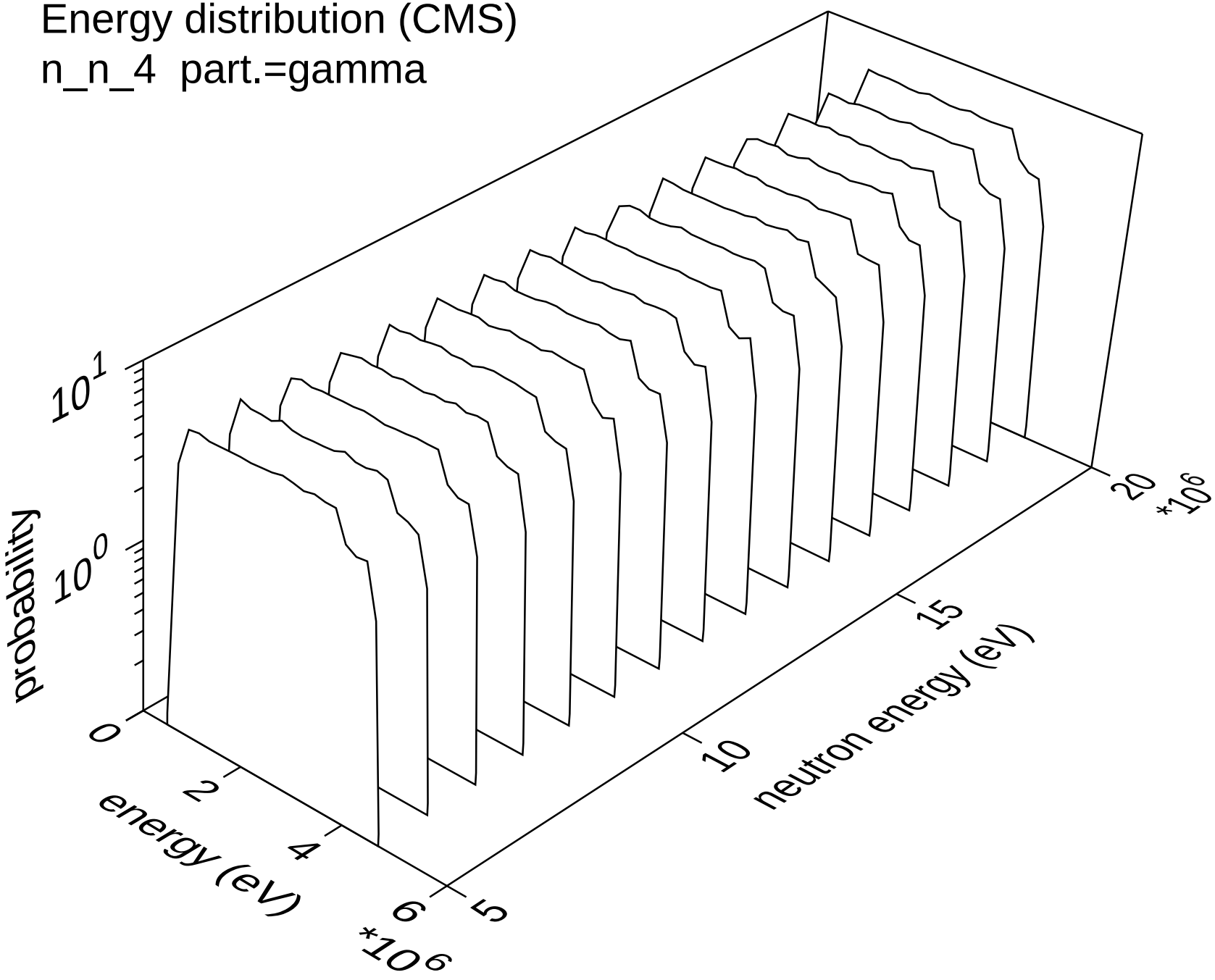

Energy distribution (CMS)
n_n_2 part.=neutron
probability
10^{-1}
0
5
10
15
20
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

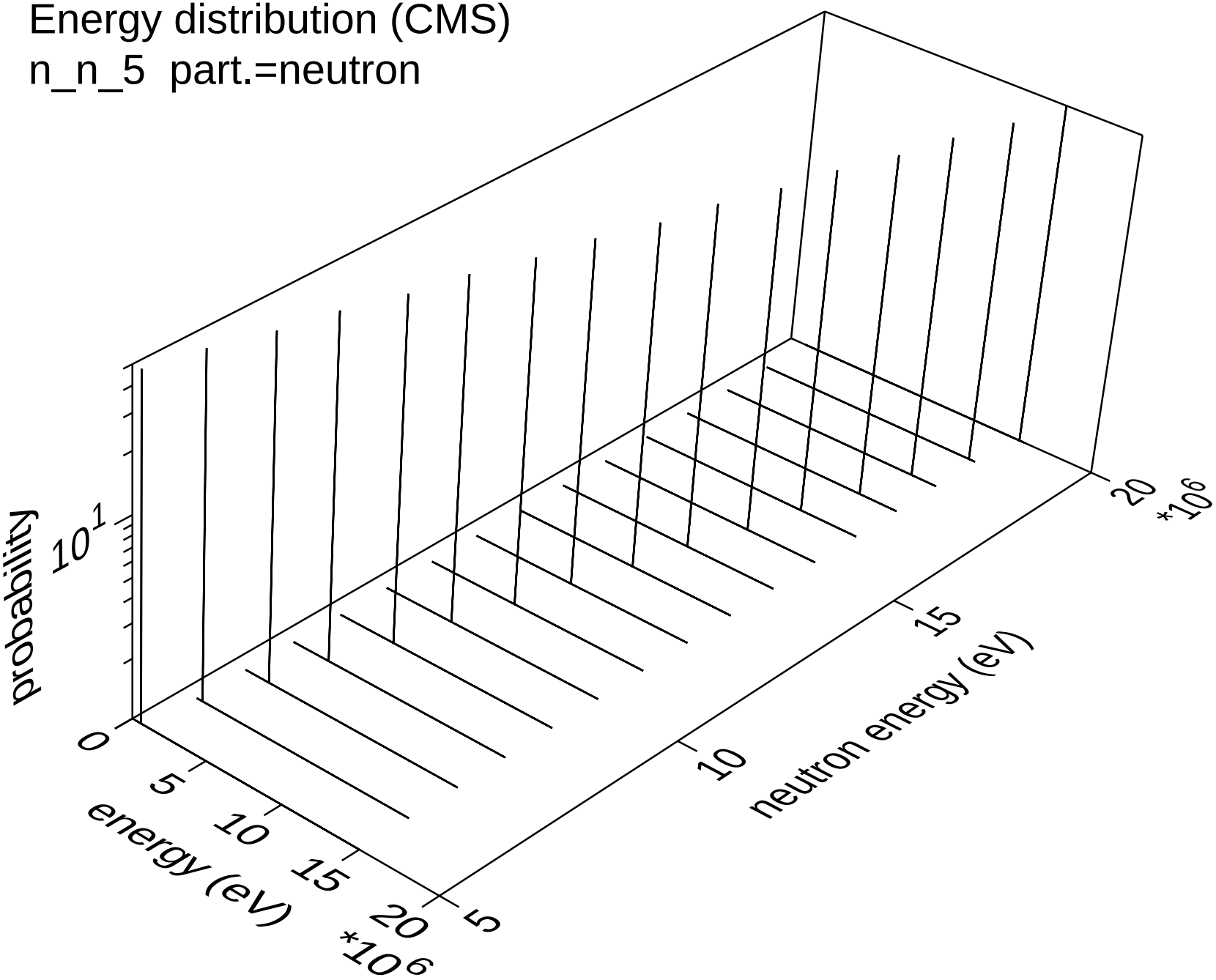

Energy distribution (CMS)
n_n_2 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

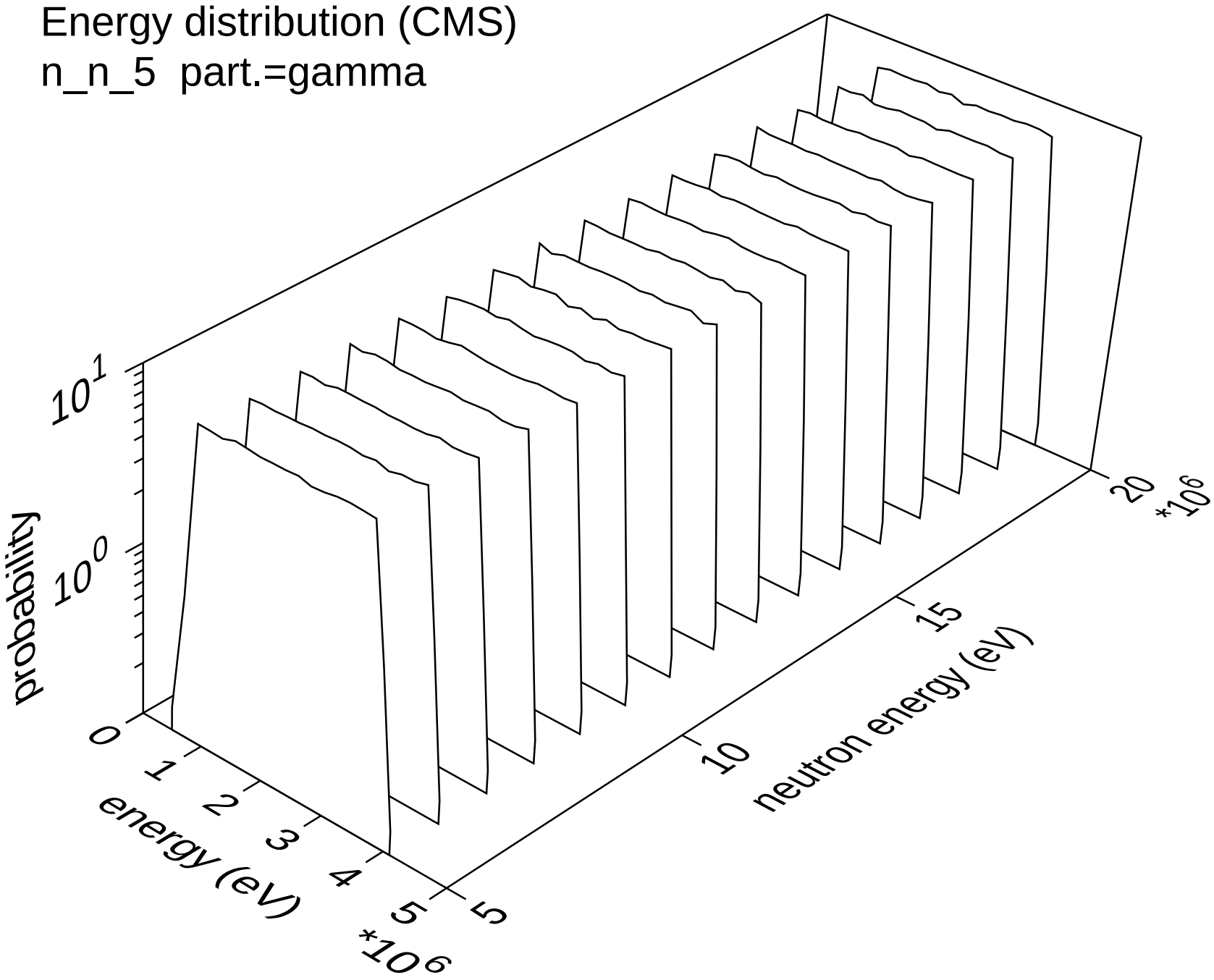

Energy distribution (CMS)
n_n_3 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

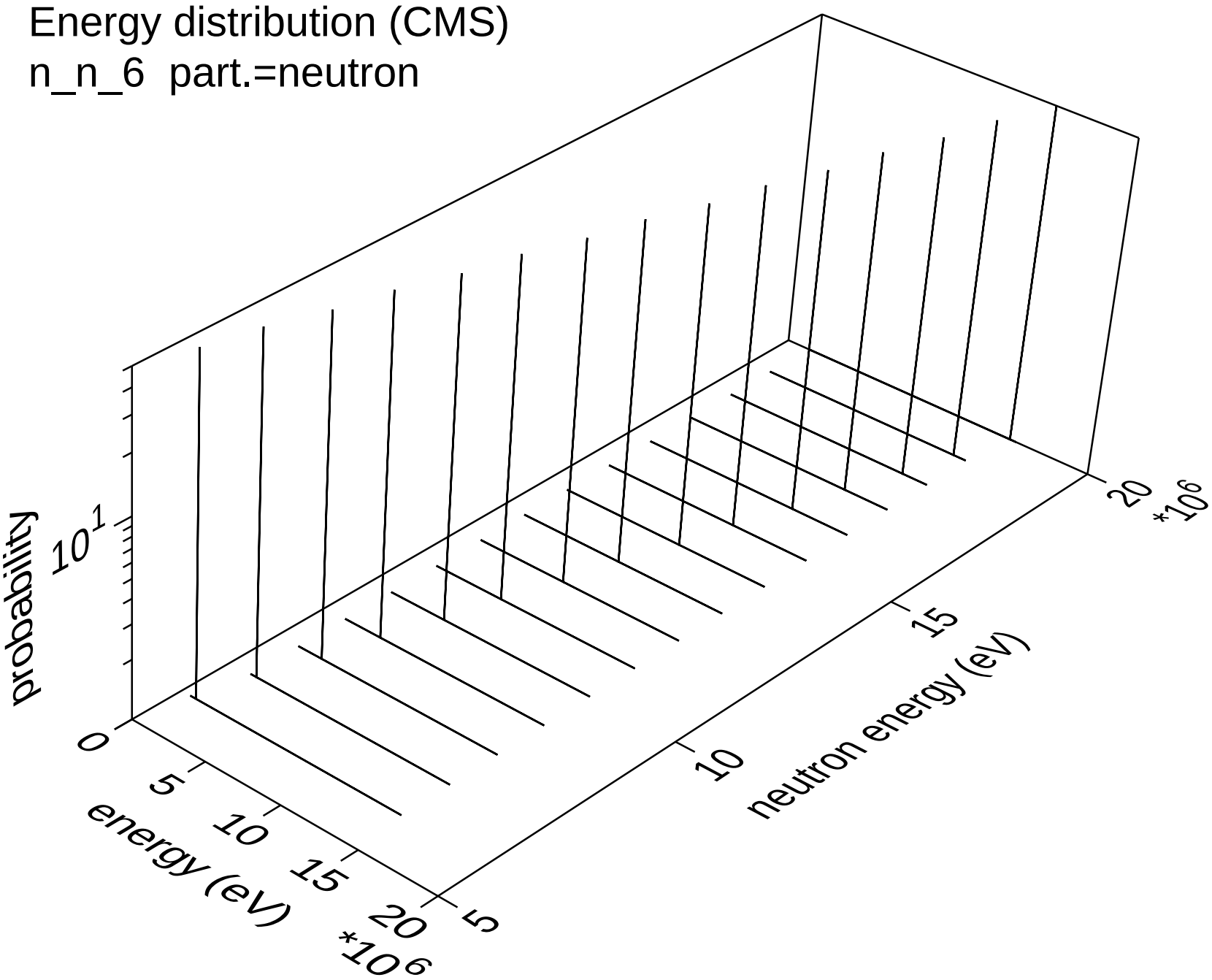

Energy distribution (CMS)
n_n_3 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

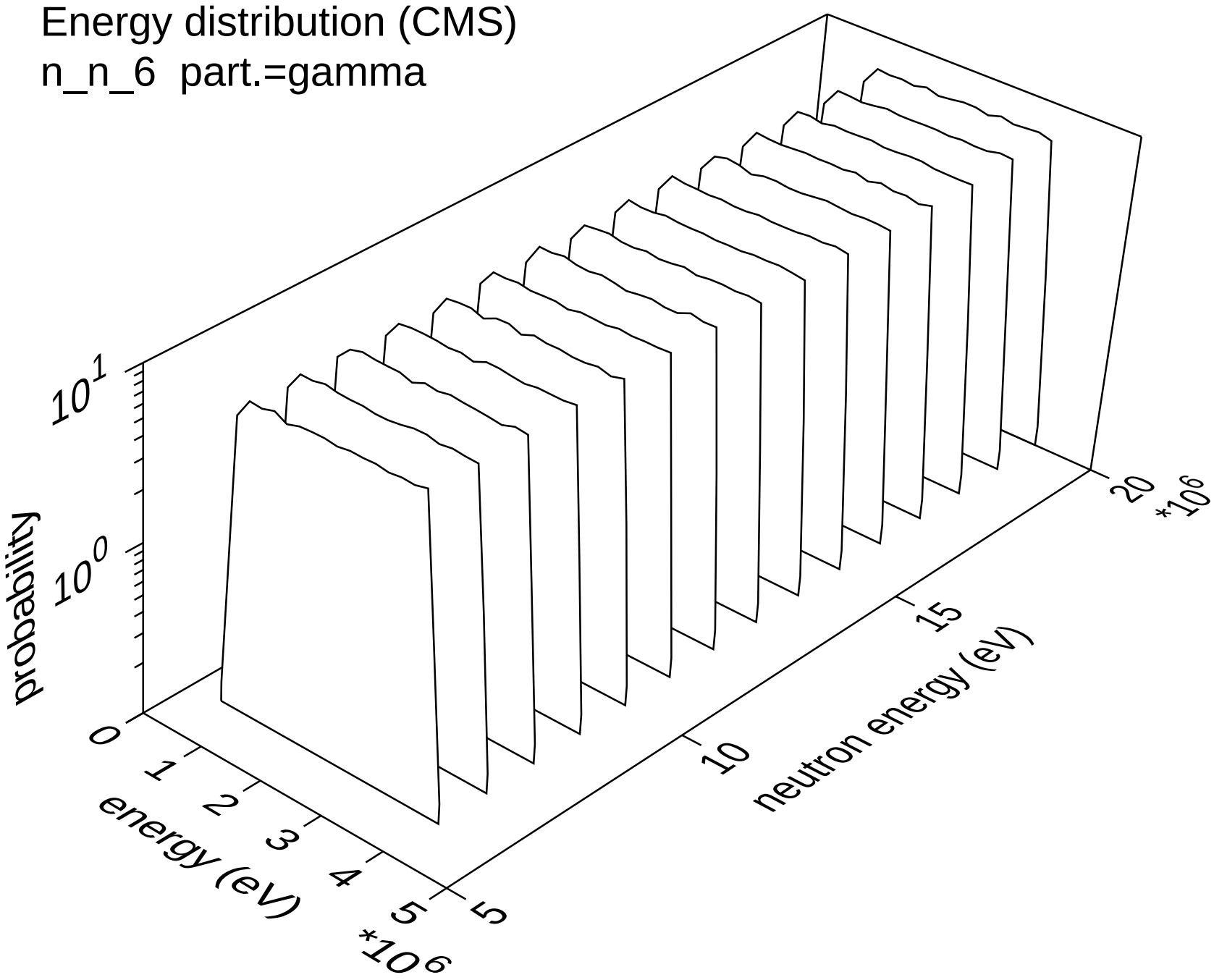

Energy distribution (CMS)
n_n_4 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

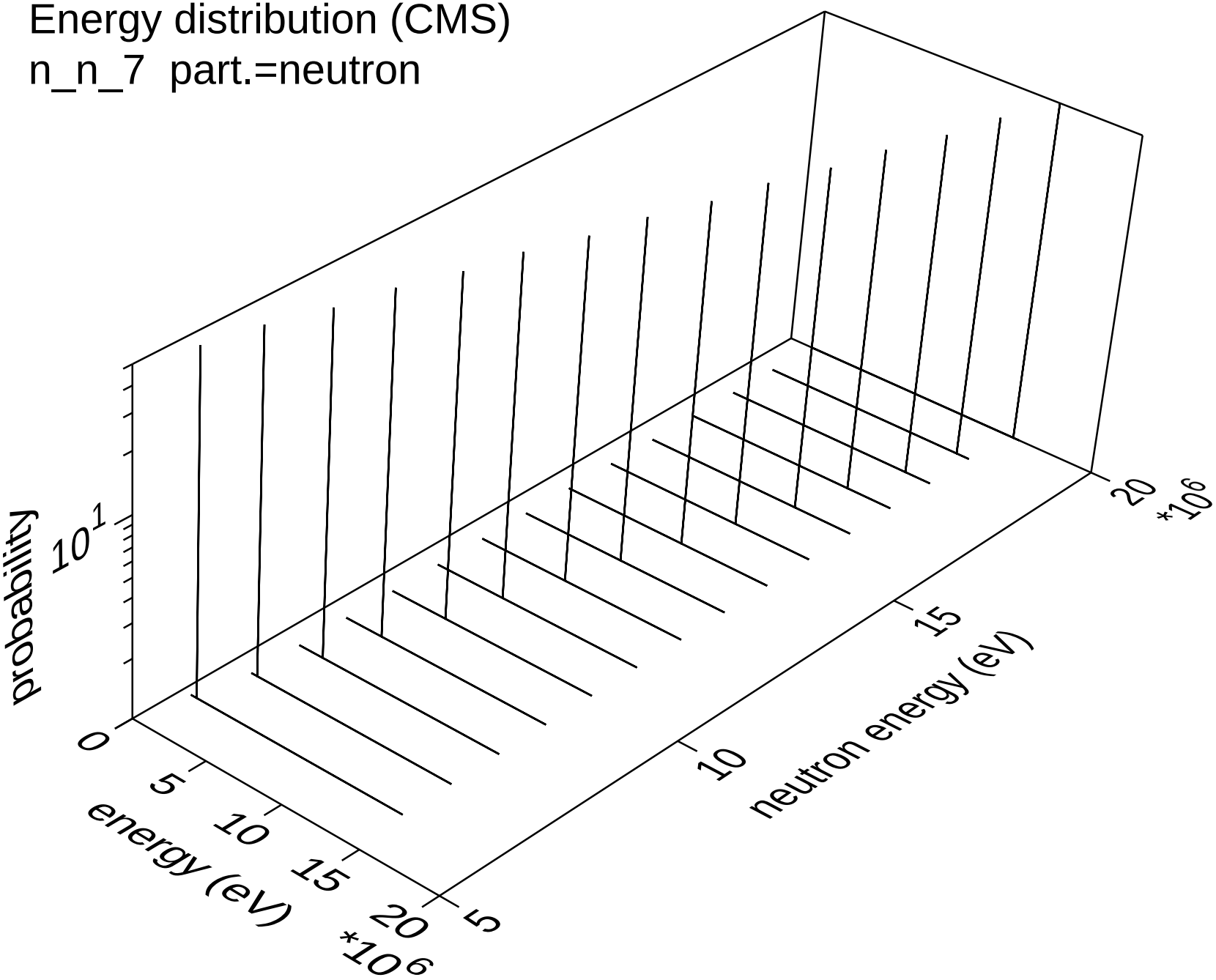

Energy distribution (CMS)
n_n_4 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

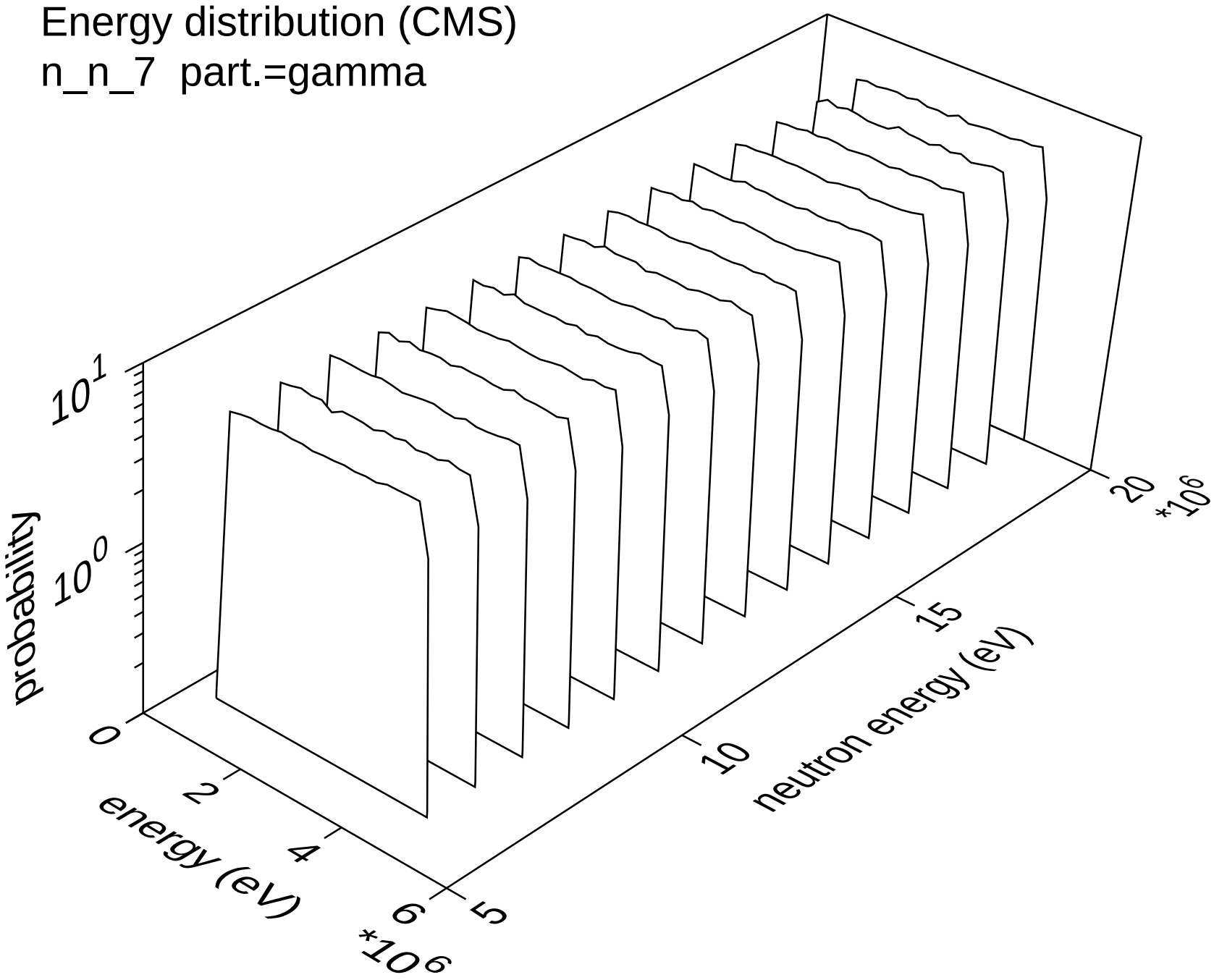

Energy distribution (CMS)
n_n_5 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

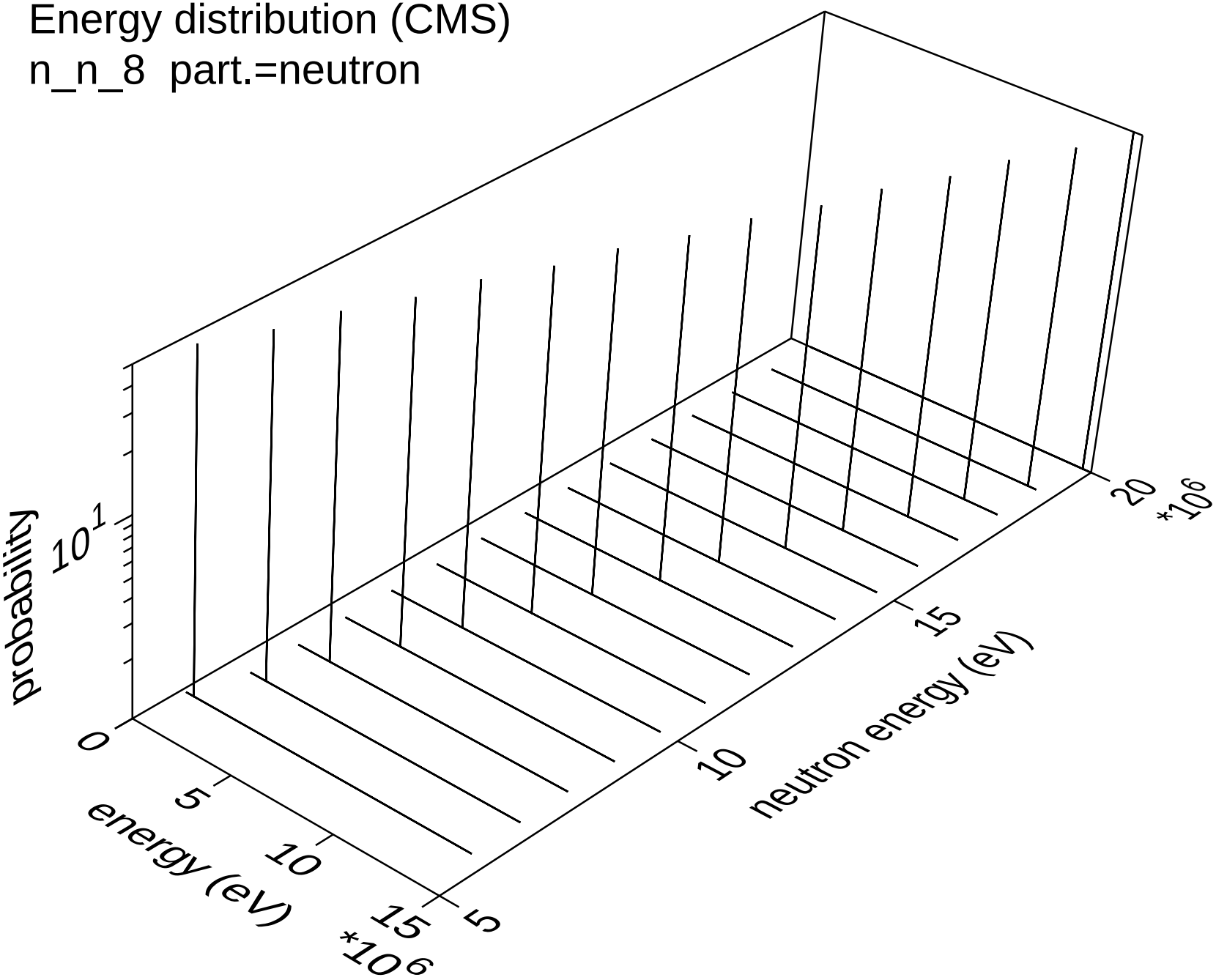

Energy distribution (CMS)
n_n_5 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
energy (eV)
*10 6
5
10
15
20
neutron energy (eV)
*10 6

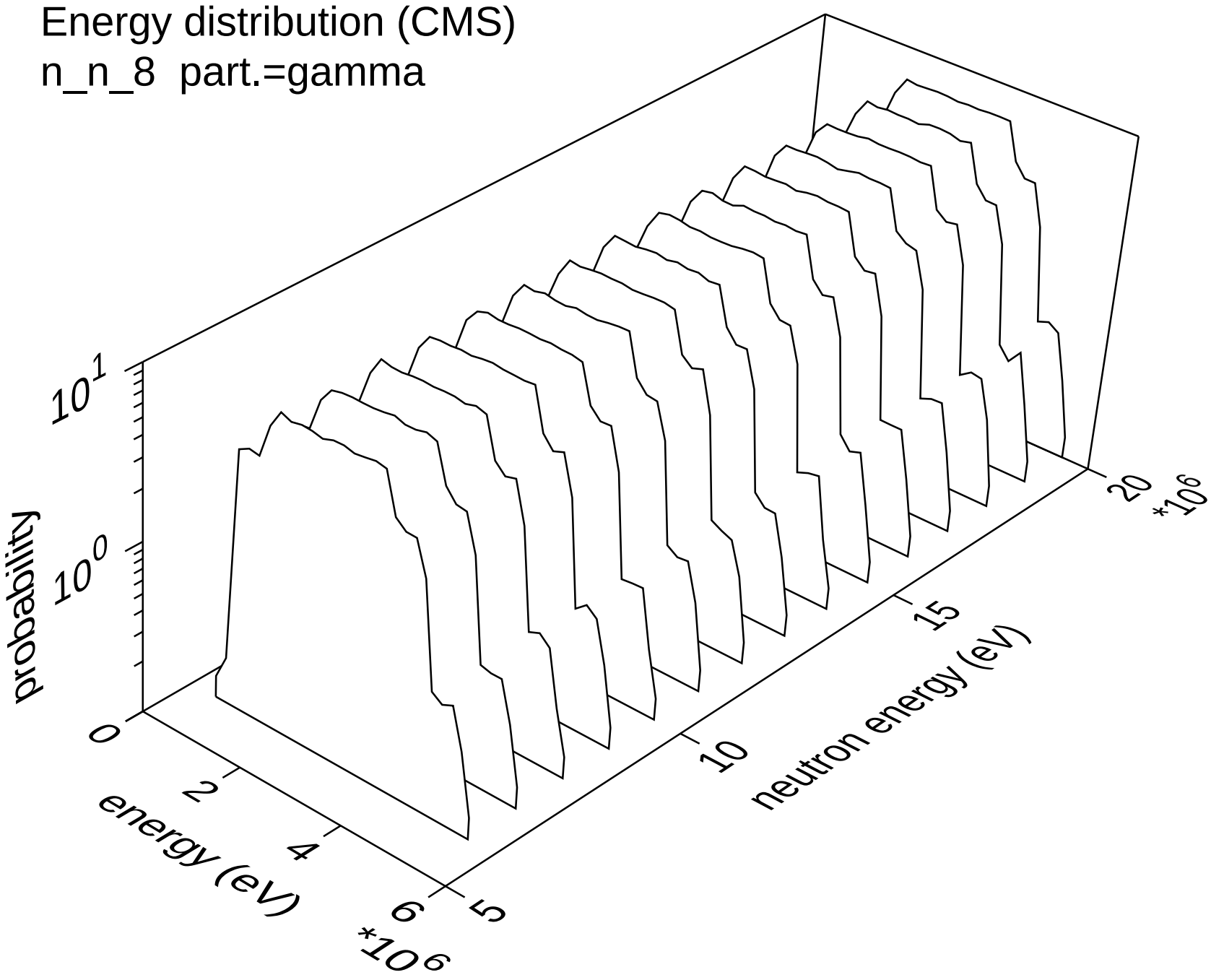

Energy distribution (CMS)
n_n_6 part.=neutron
probability
10^{1}
0
5
10
15
20
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

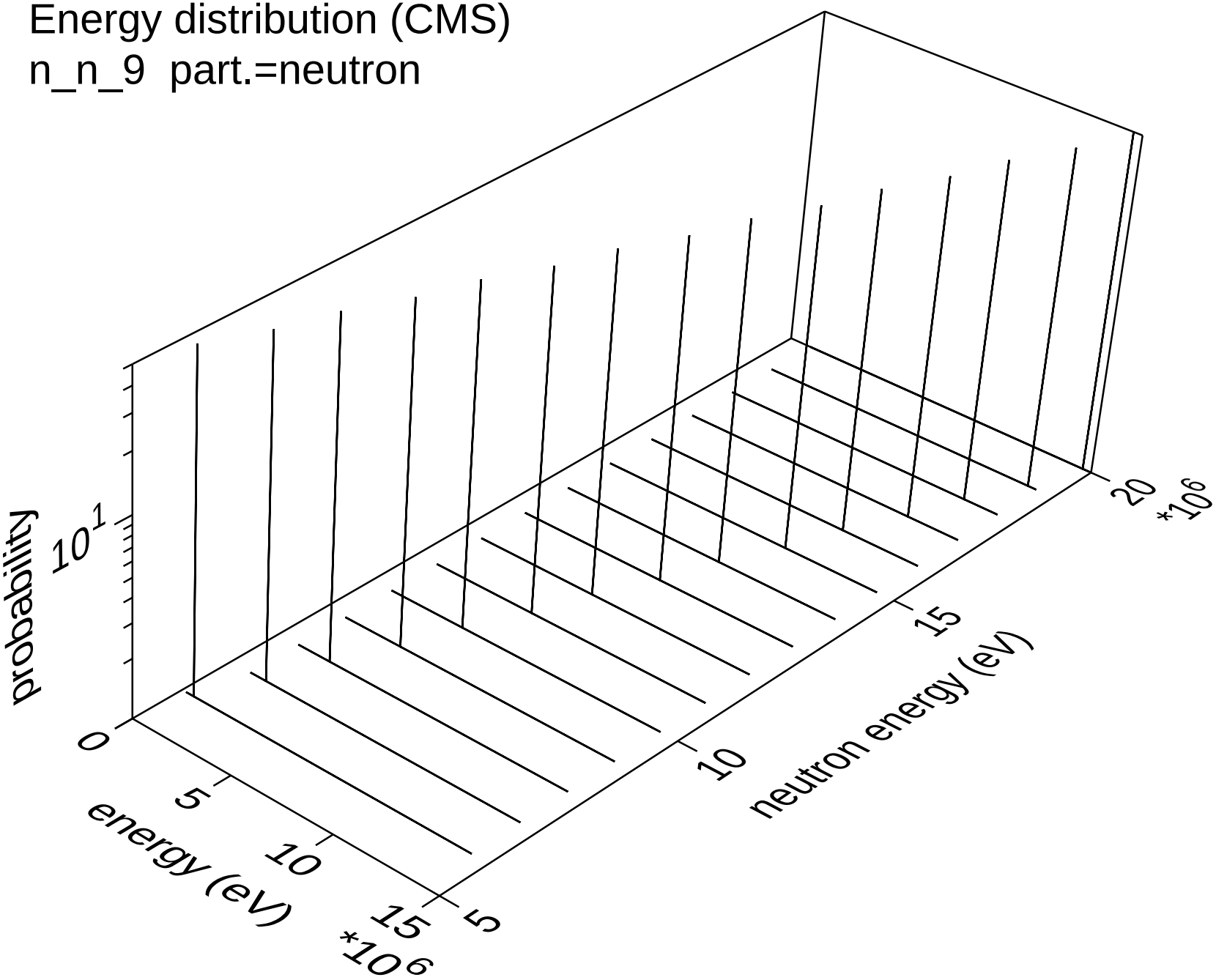

Energy distribution (CMS)
n_n_6 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

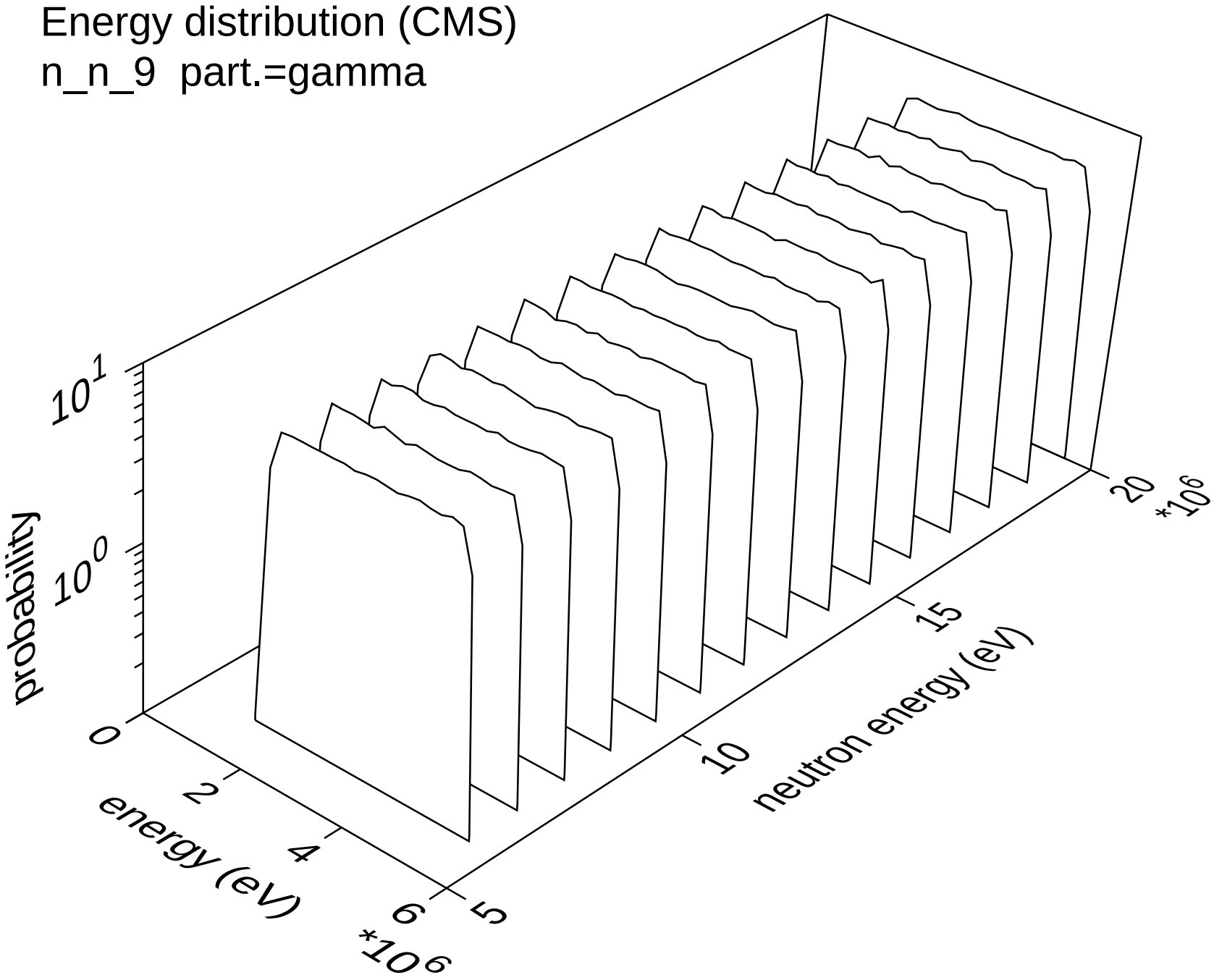

Energy distribution (CMS)
n_n_7 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
20
*10^6
5
10
15
20
*10^6
neutron energy (eV)

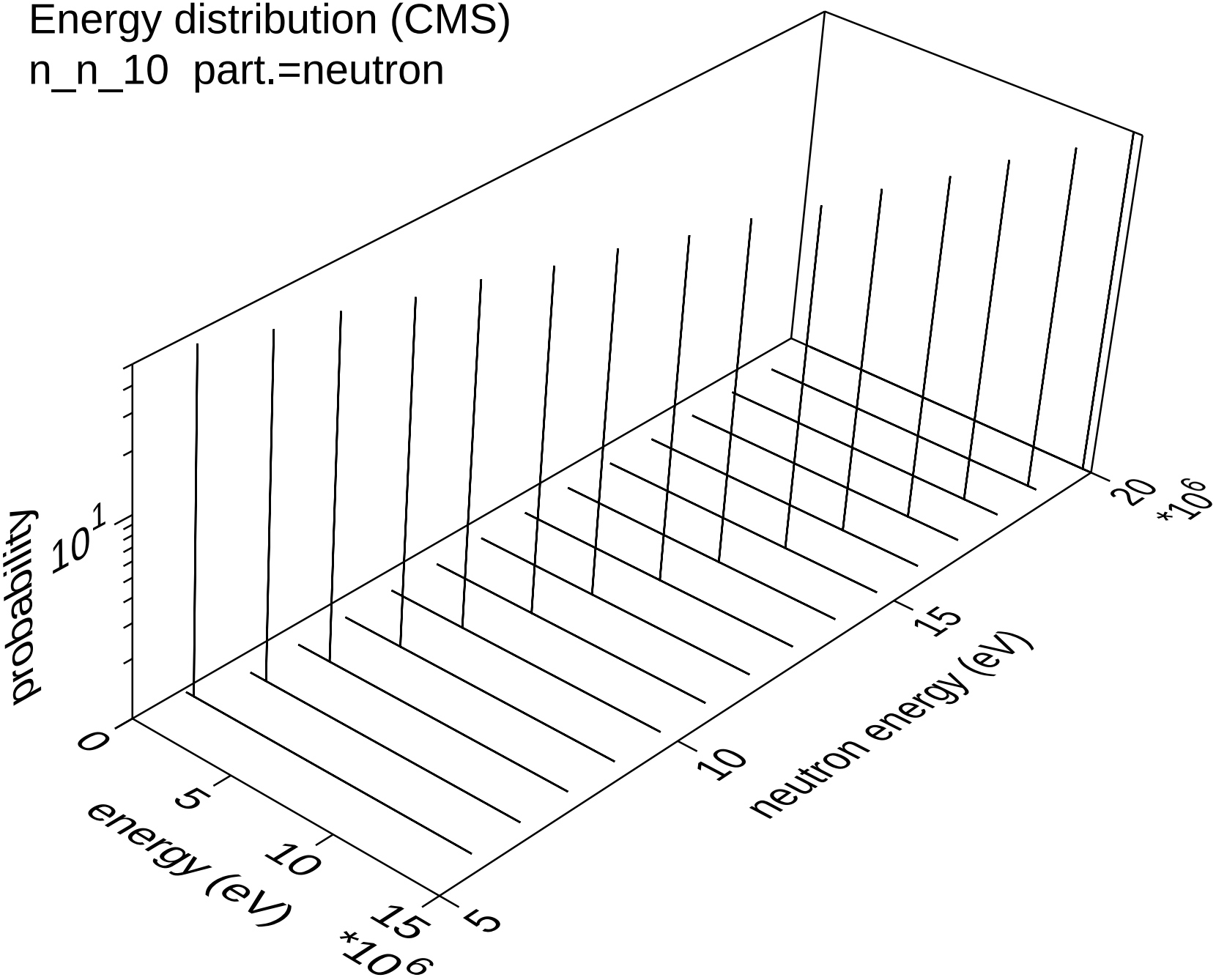

Energy distribution (CMS)
n_n_7 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

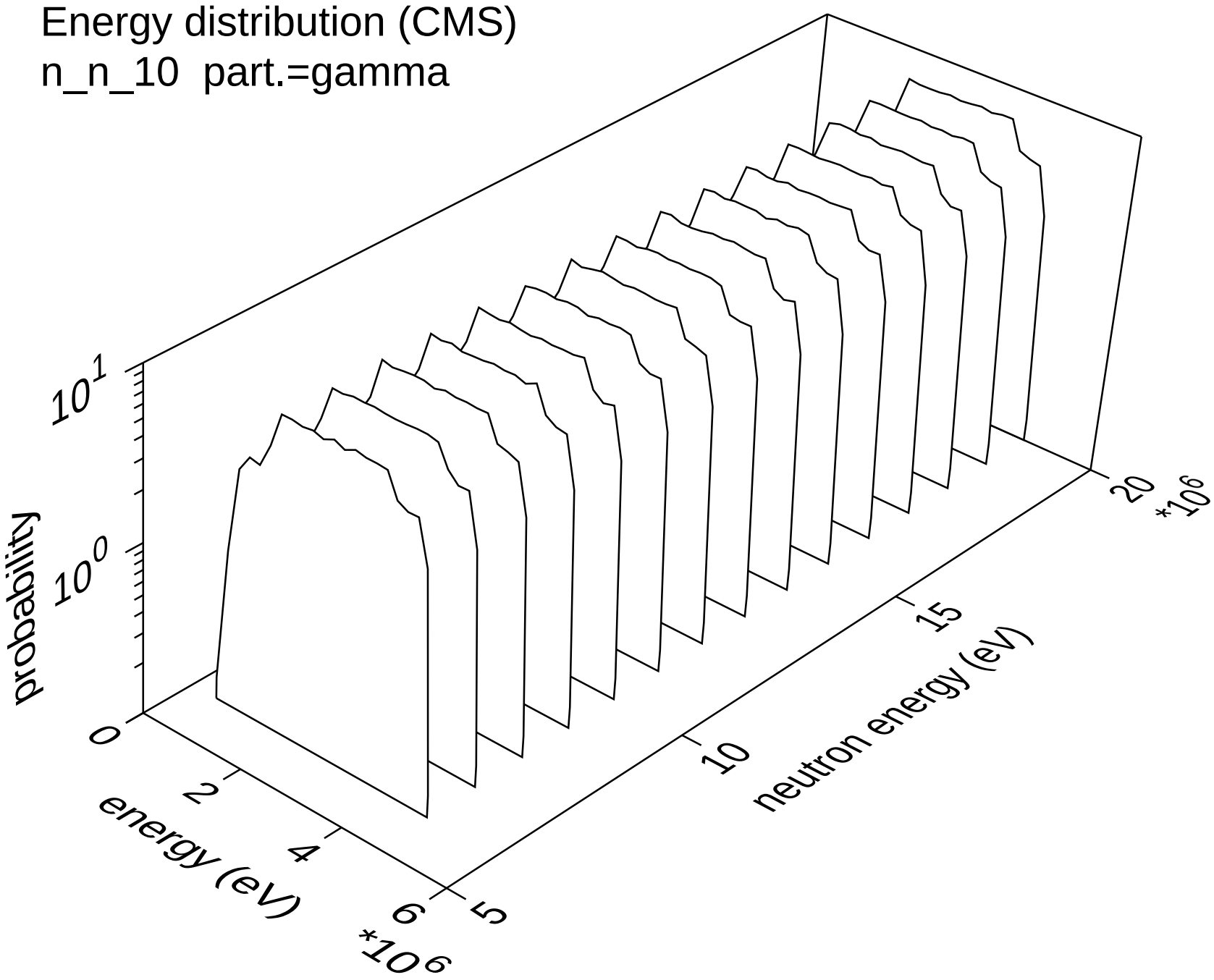

Energy distribution (CMS)
n_n_8 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

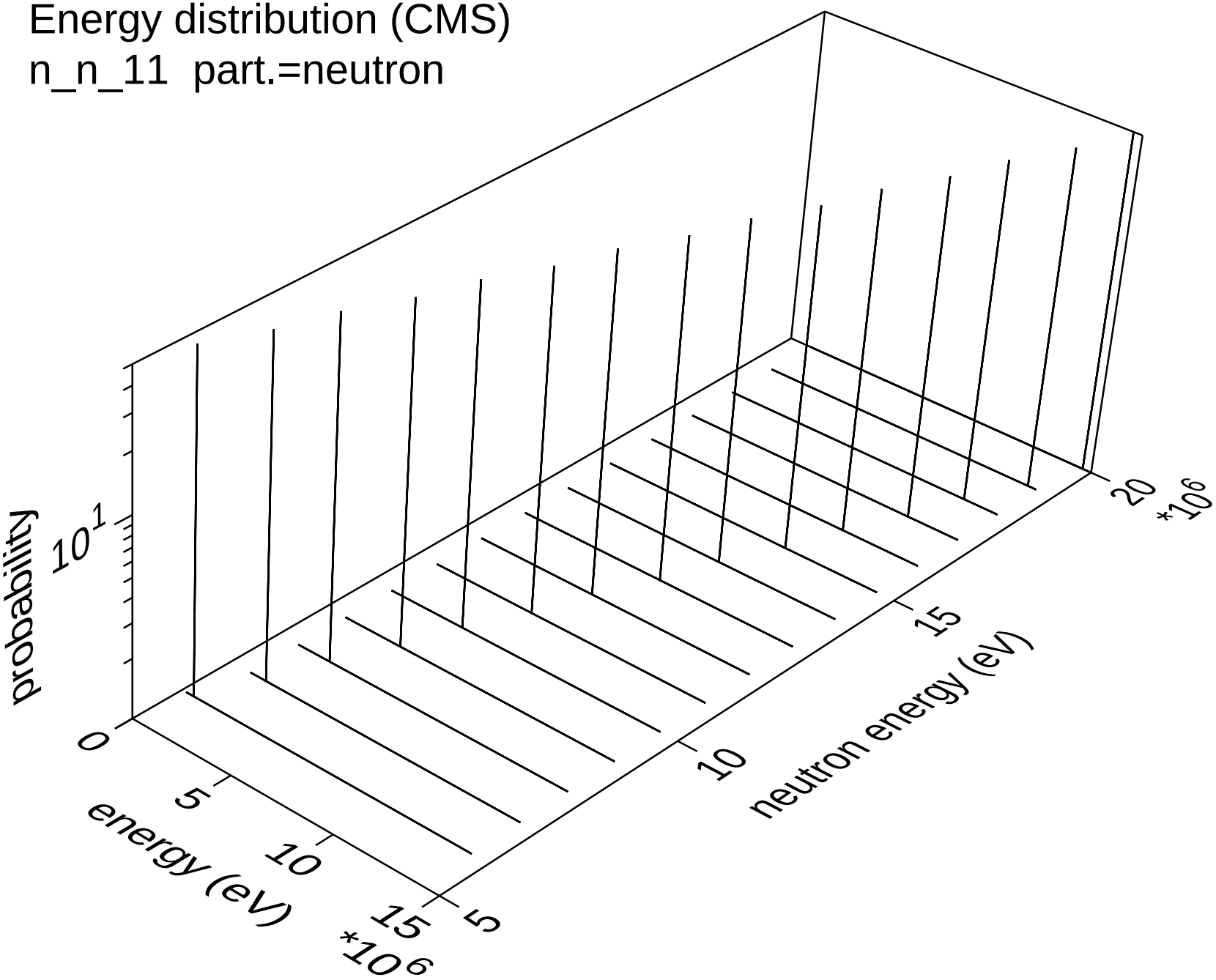

Energy distribution (CMS)
n_n_8 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

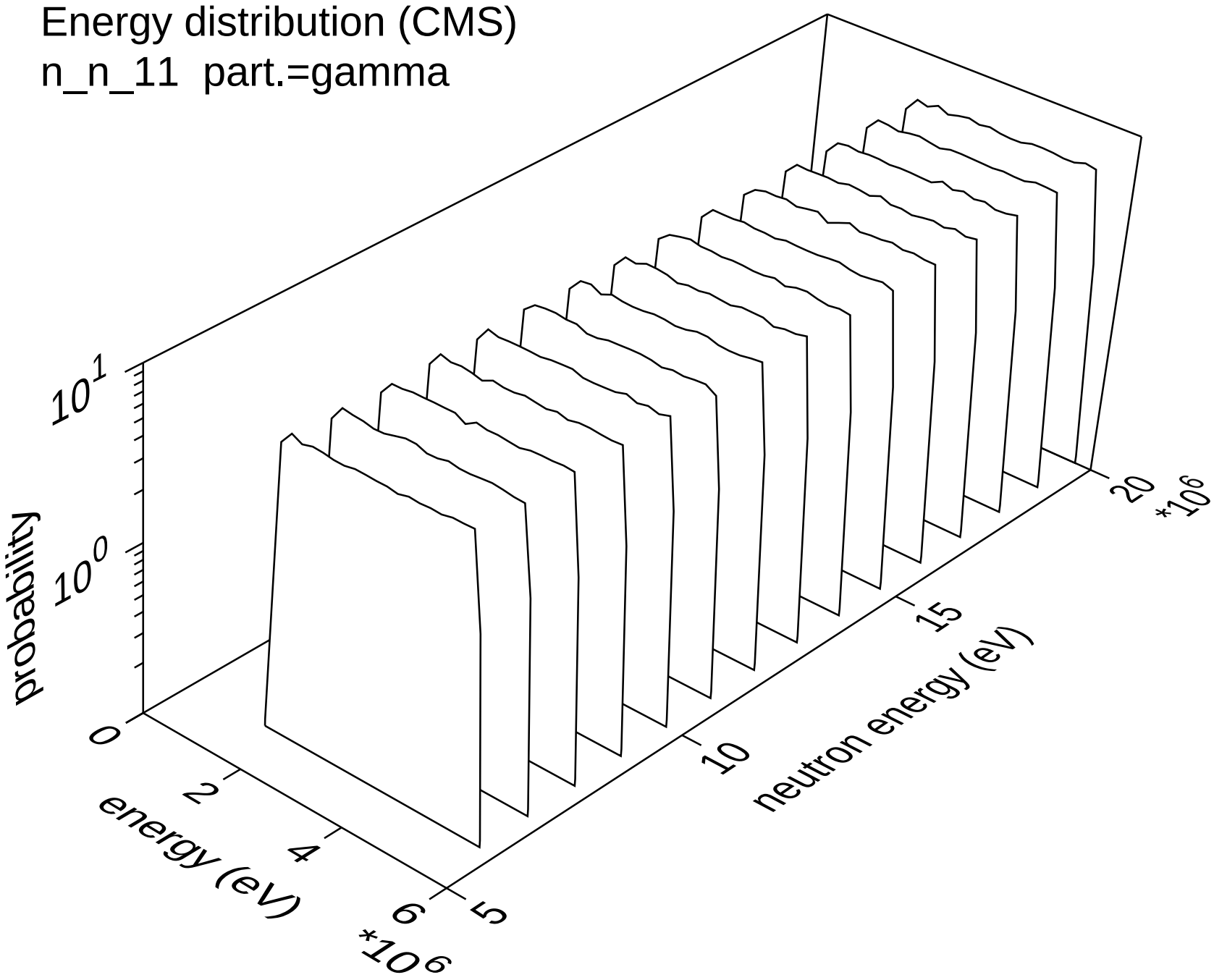

Energy distribution (CMS)
n_n_9 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

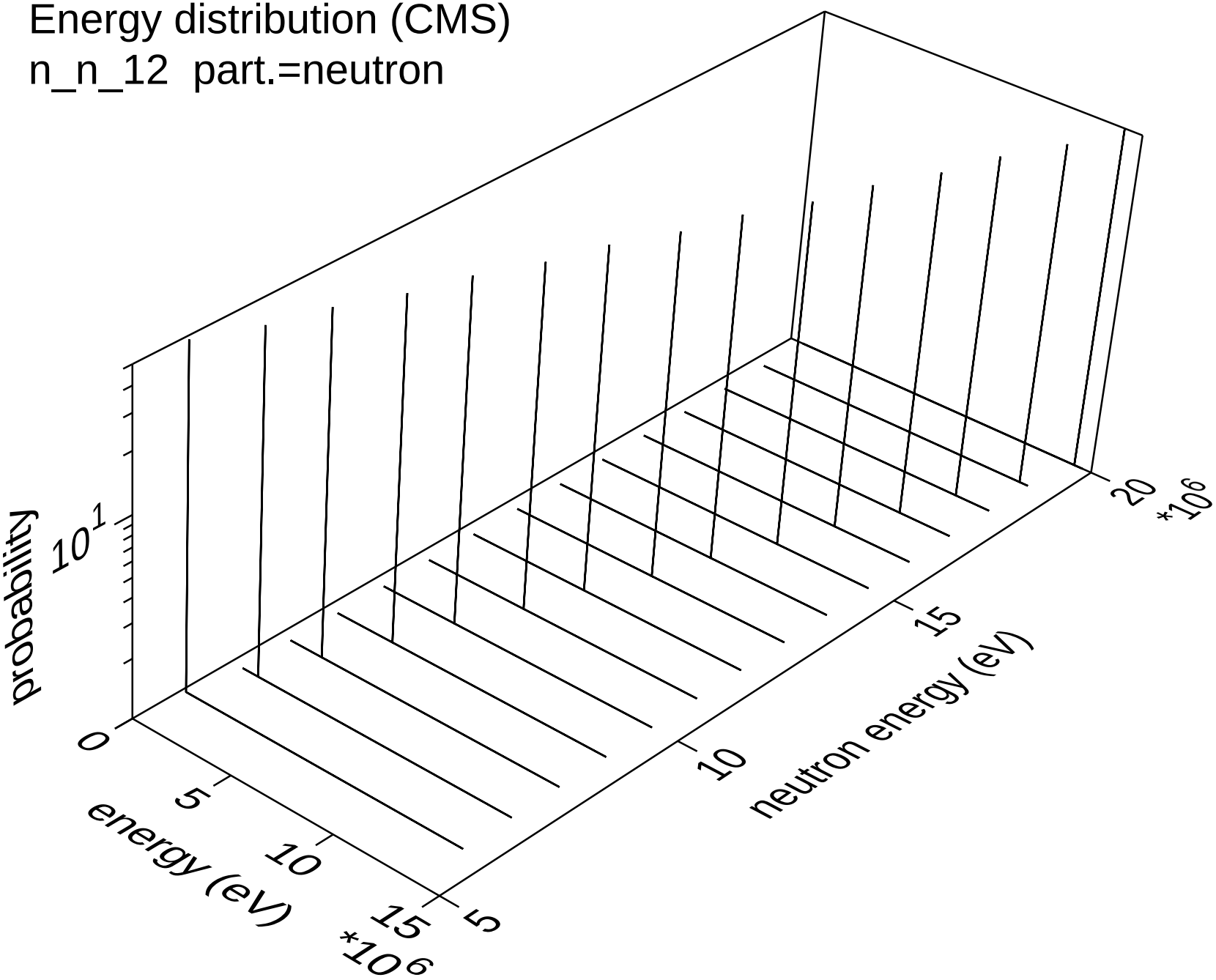

Energy distribution (CMS)
n_n_9 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

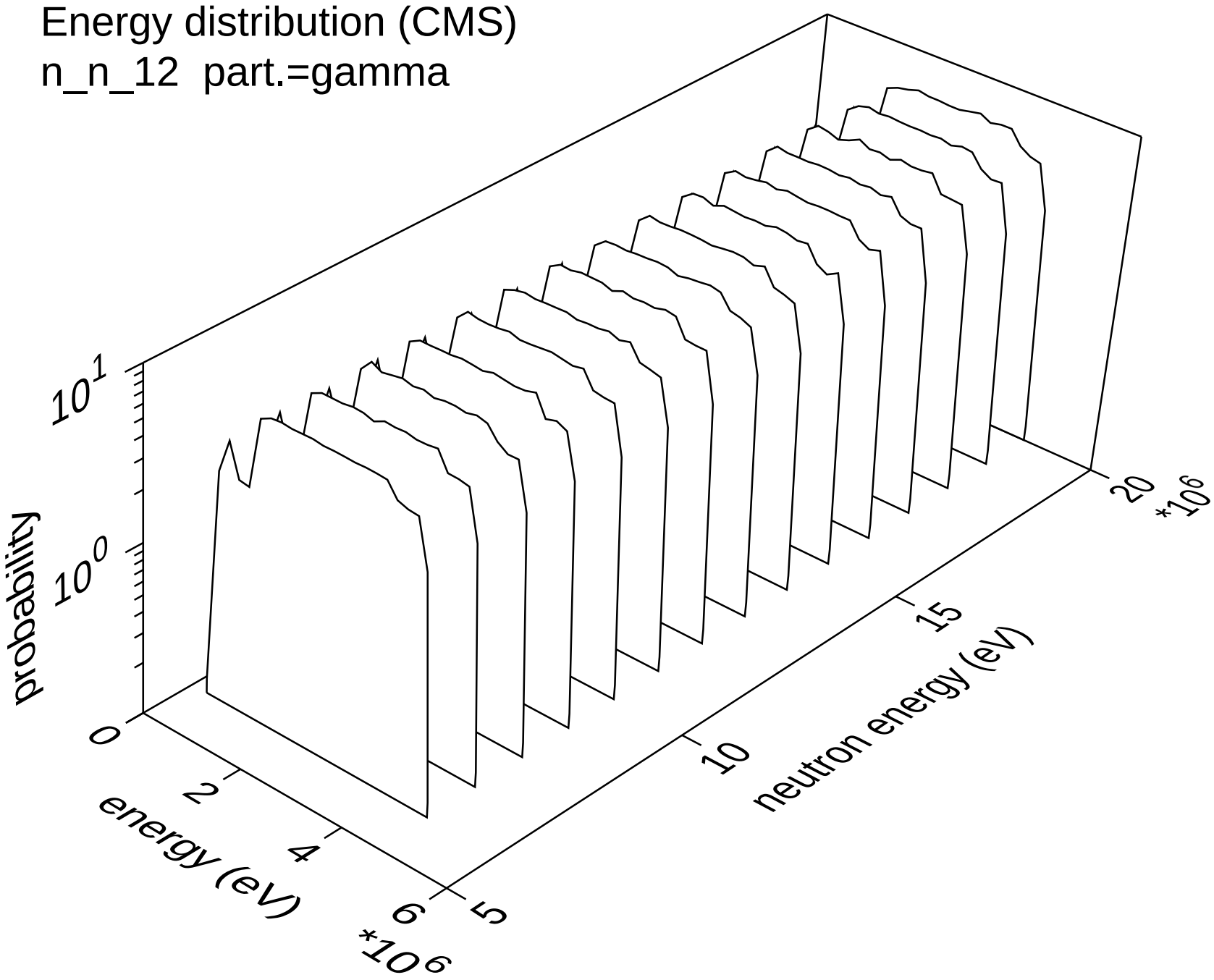

Energy distribution (CMS)
n_n_10 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

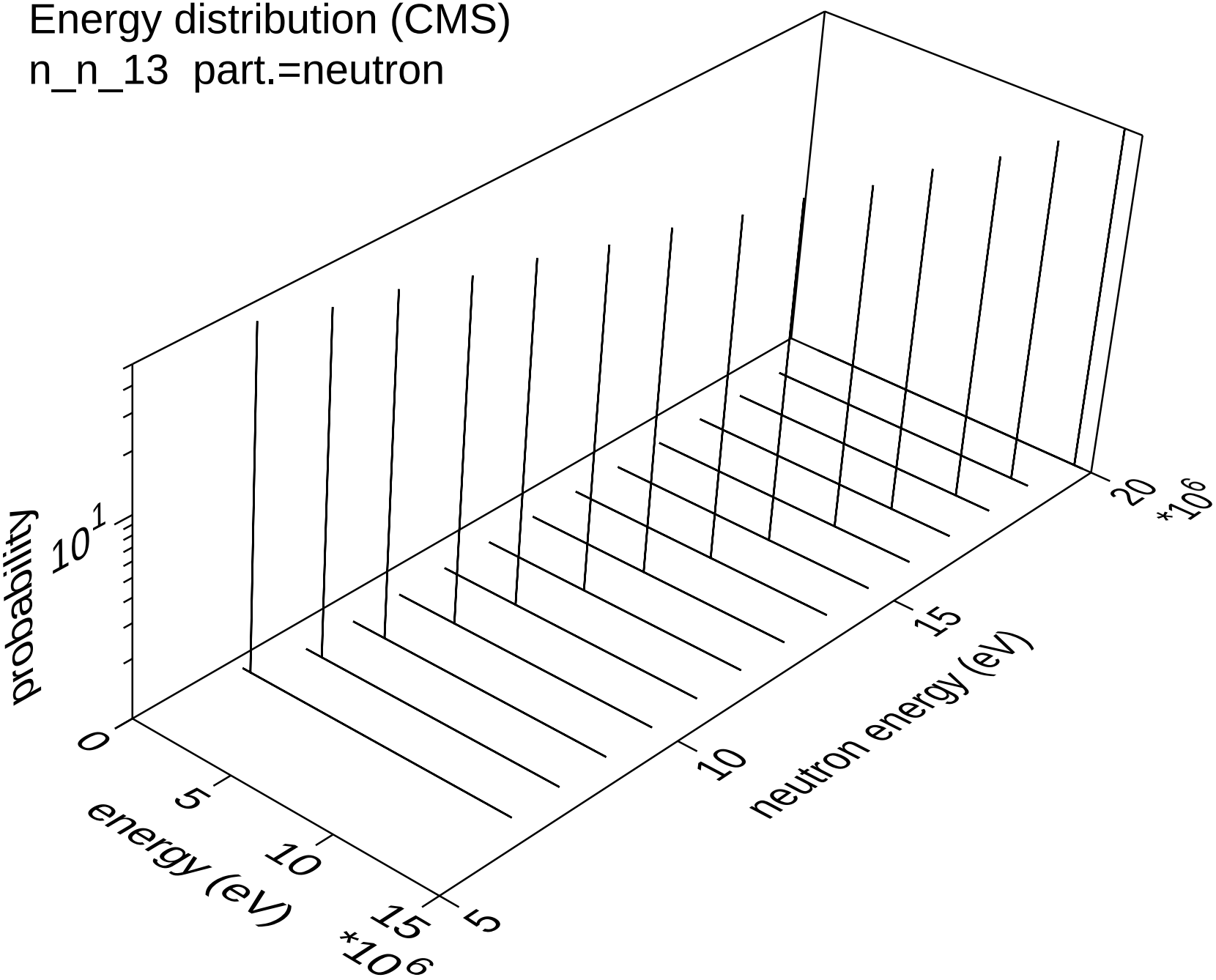

Energy distribution (CMS)
n_n_10 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

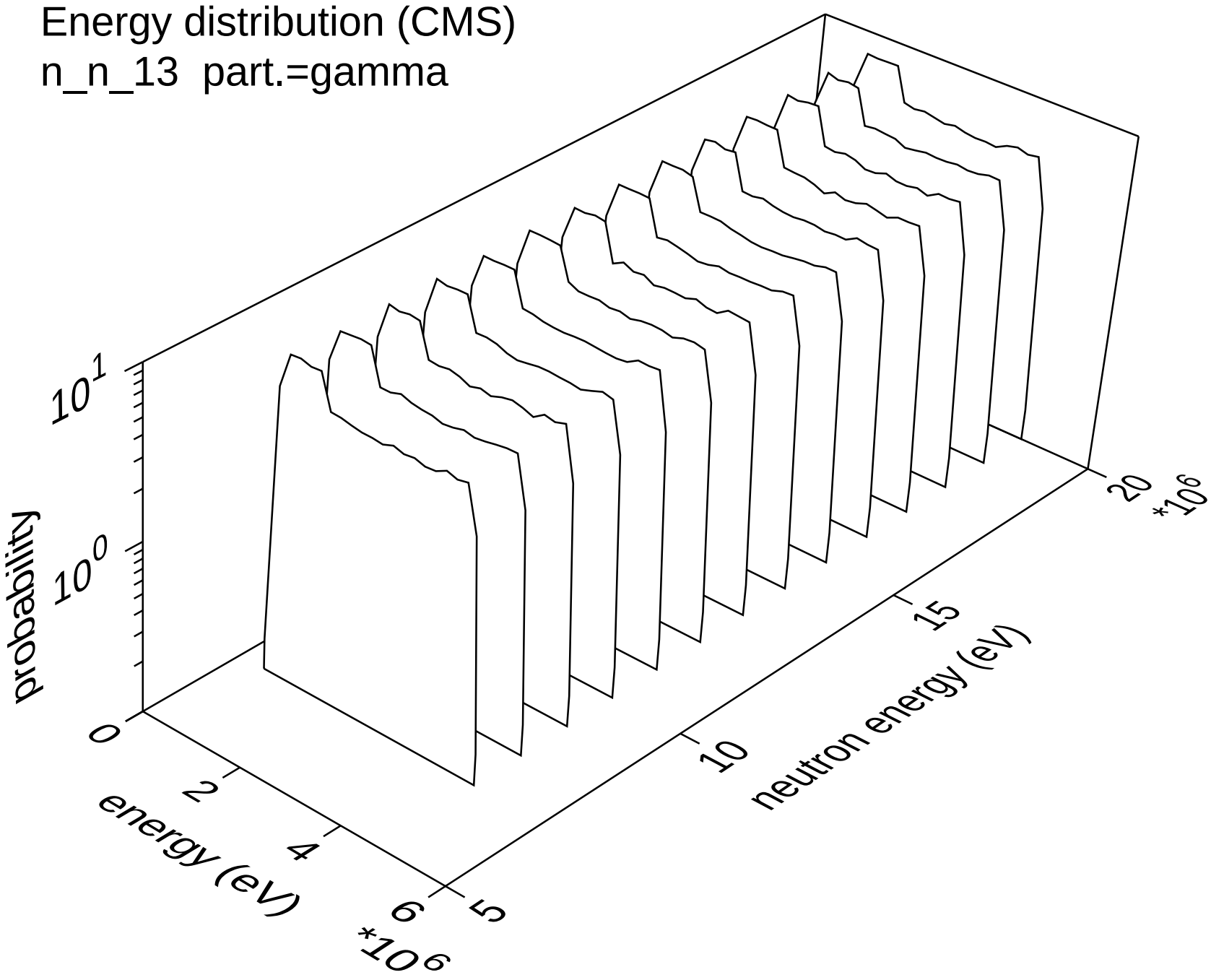

Energy distribution (CMS)
n_n_11 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

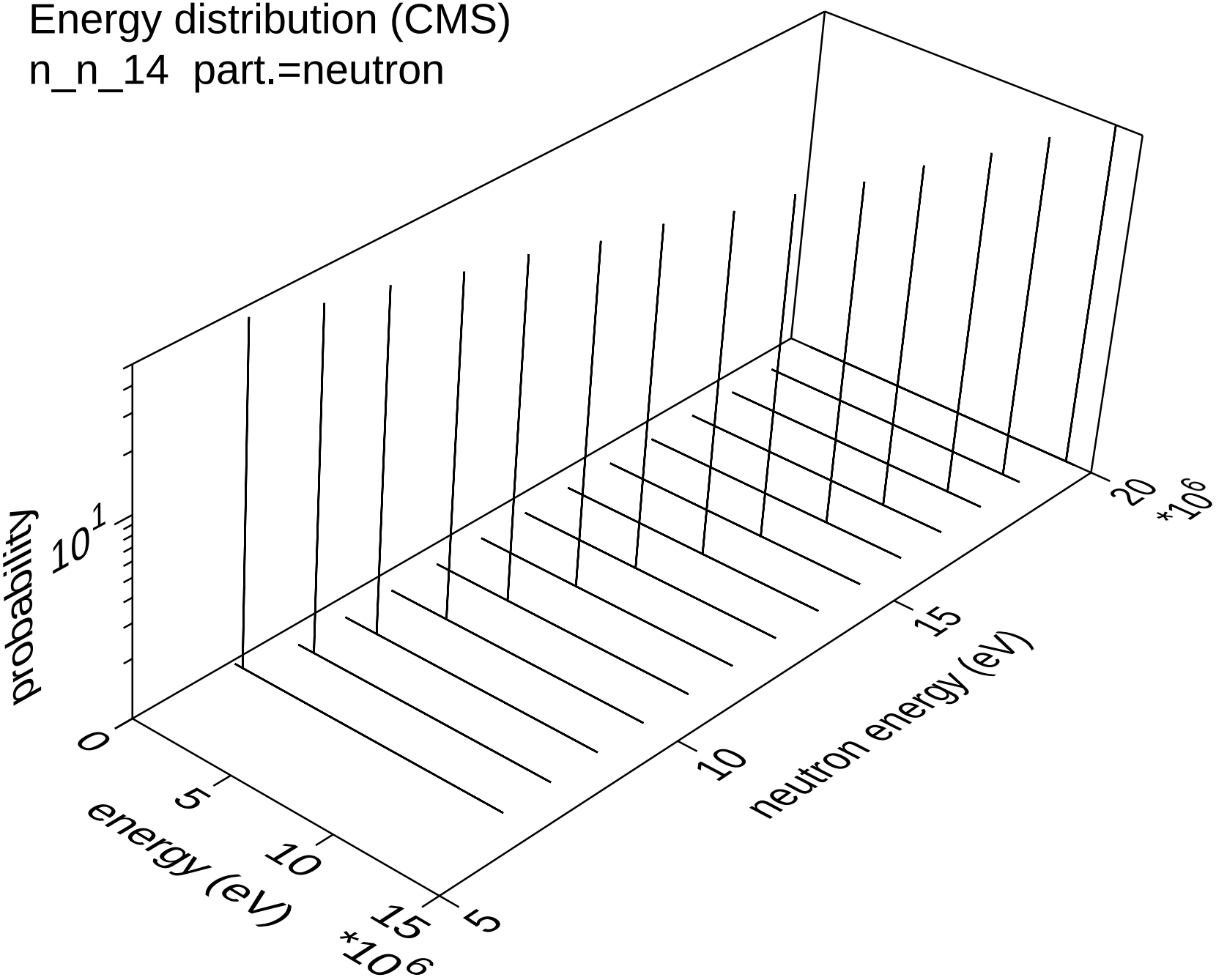

Energy distribution (CMS)
n_n_11 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

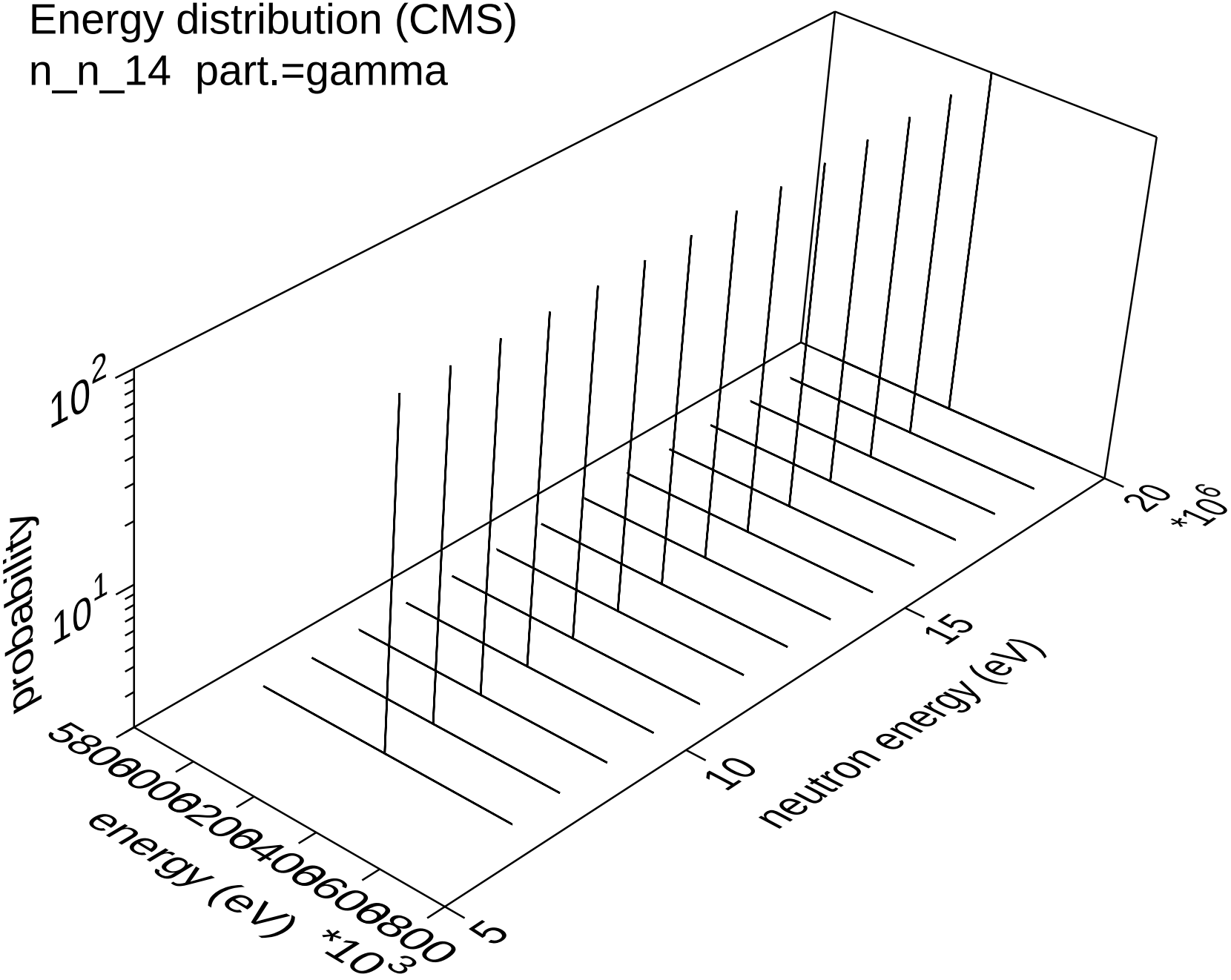

Energy distribution (CMS)
n_n_12 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_12 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

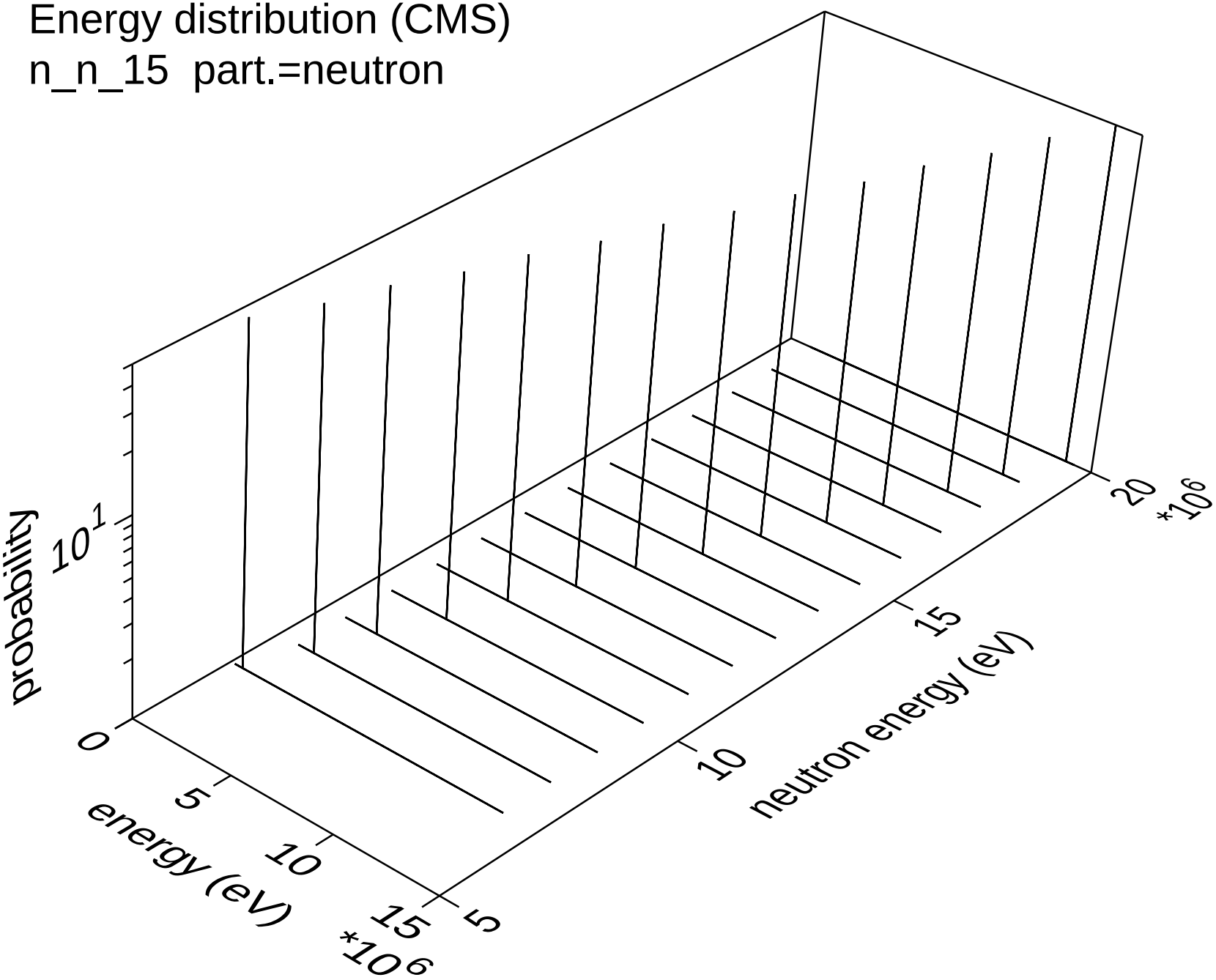

Energy distribution (CMS)
n_n_13 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

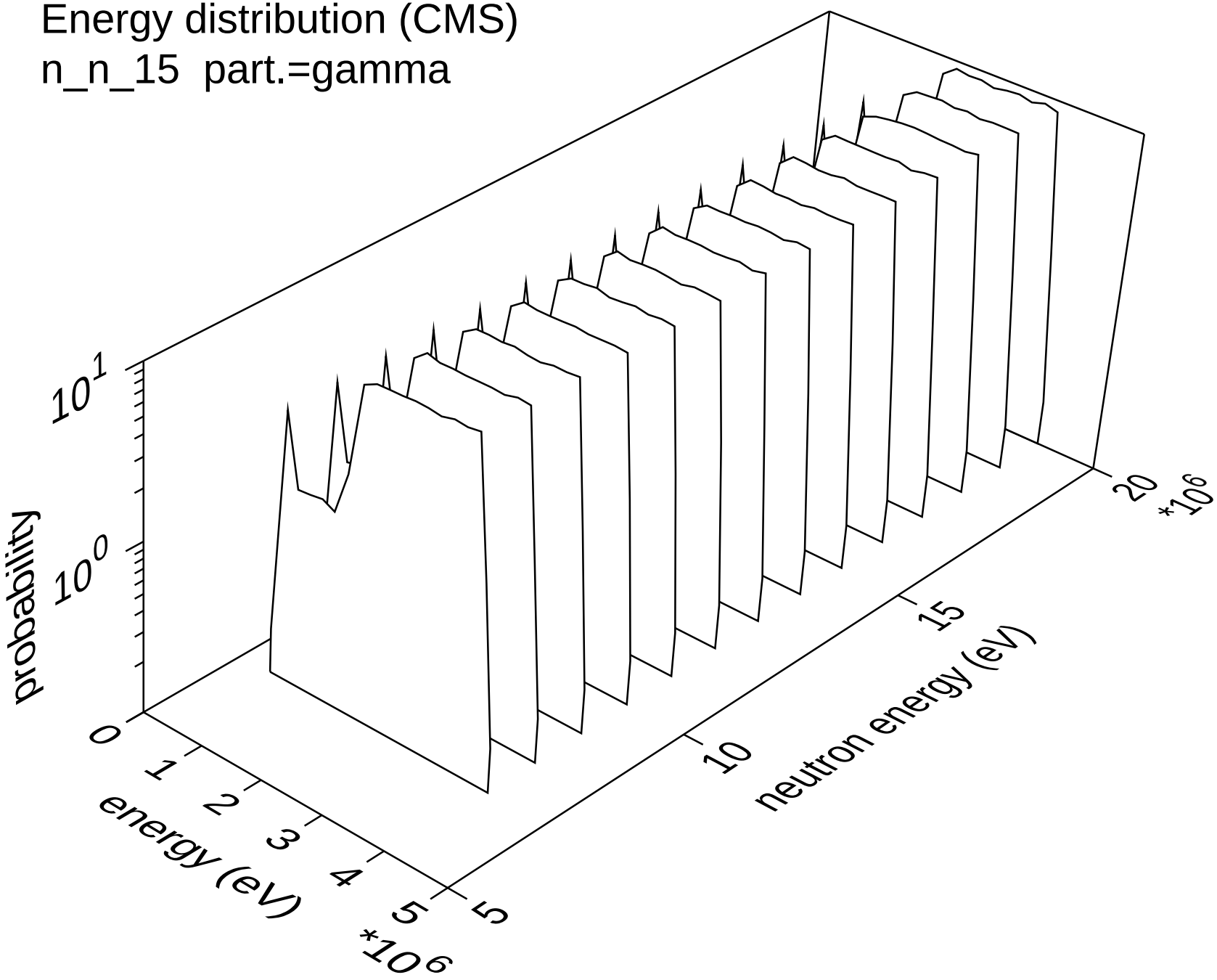

Energy distribution (CMS)
n_n_13 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

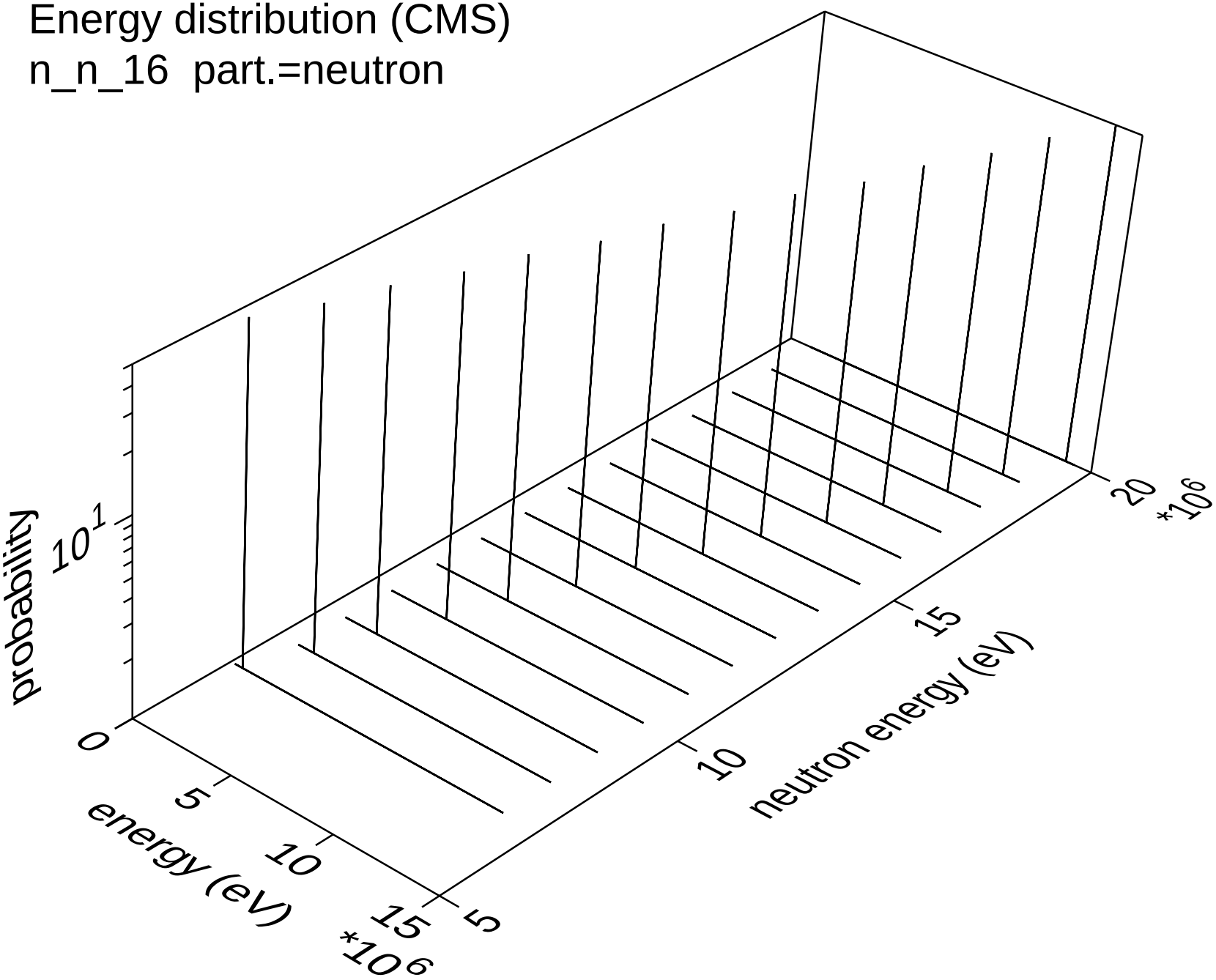

Energy distribution (CMS)
n_n_14 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

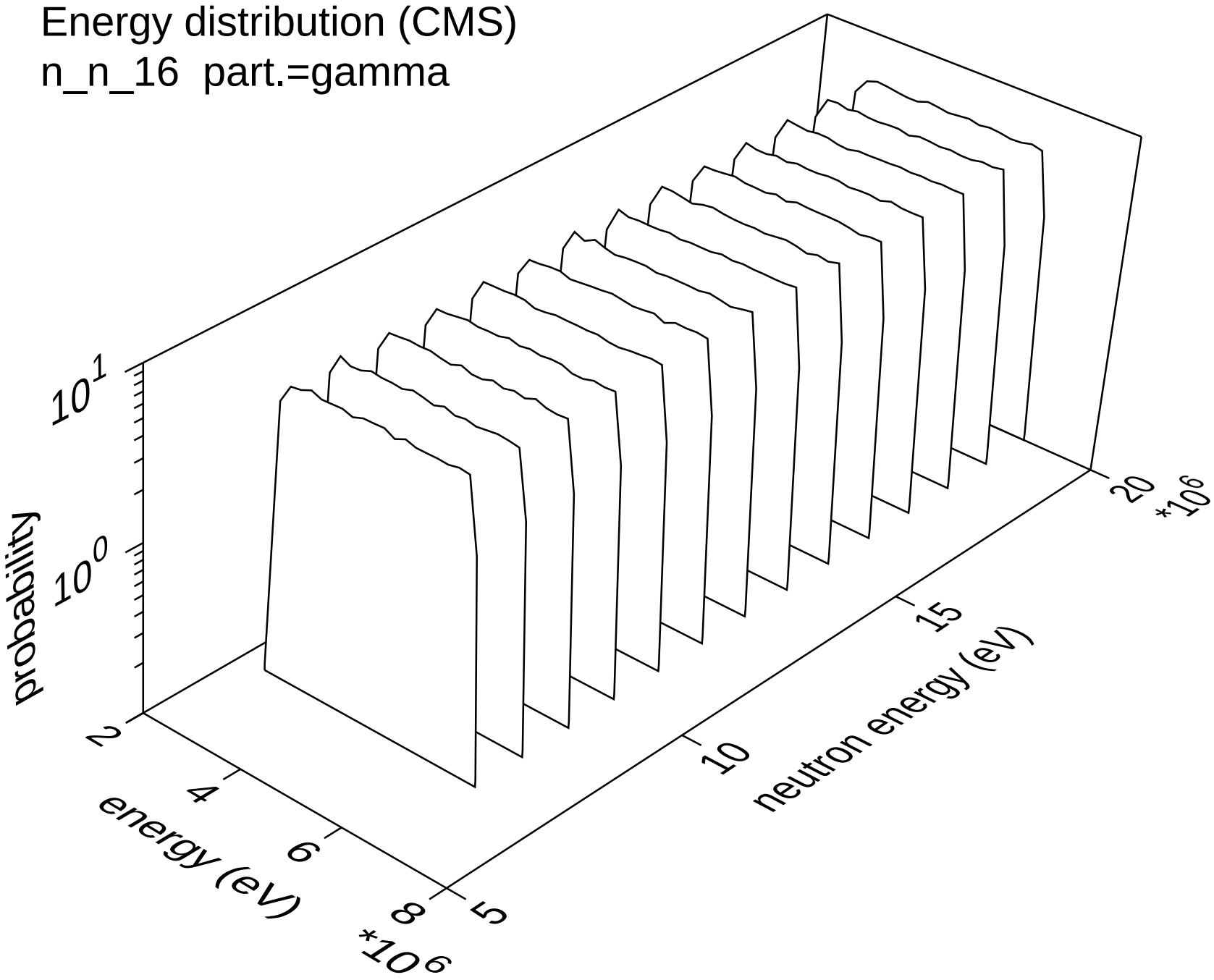


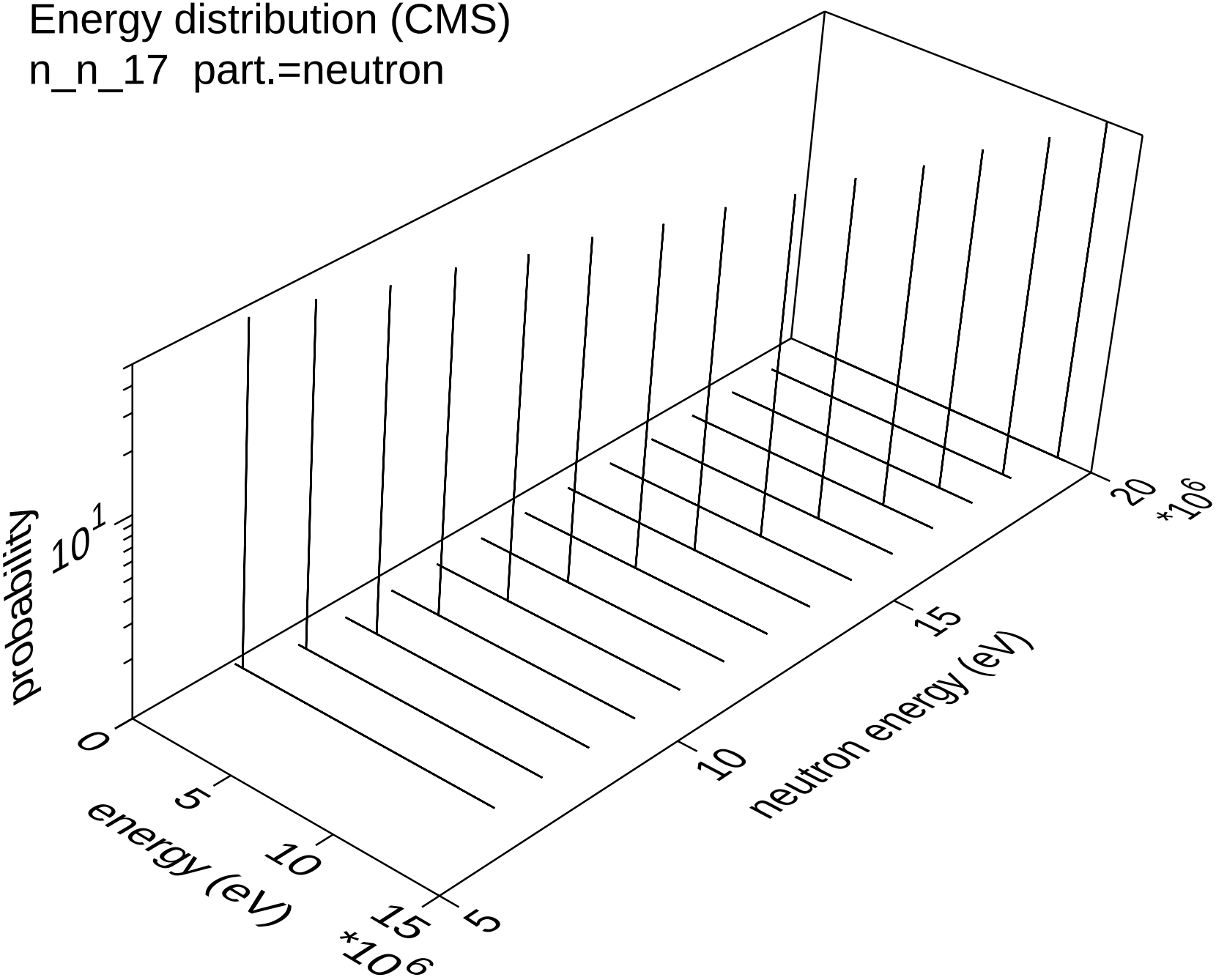
Energy distribution (CMS)
n_n_14 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
5800
6000
6200
6400
6600
6800
neutron energy (eV)
5
10
15
20
*10^6

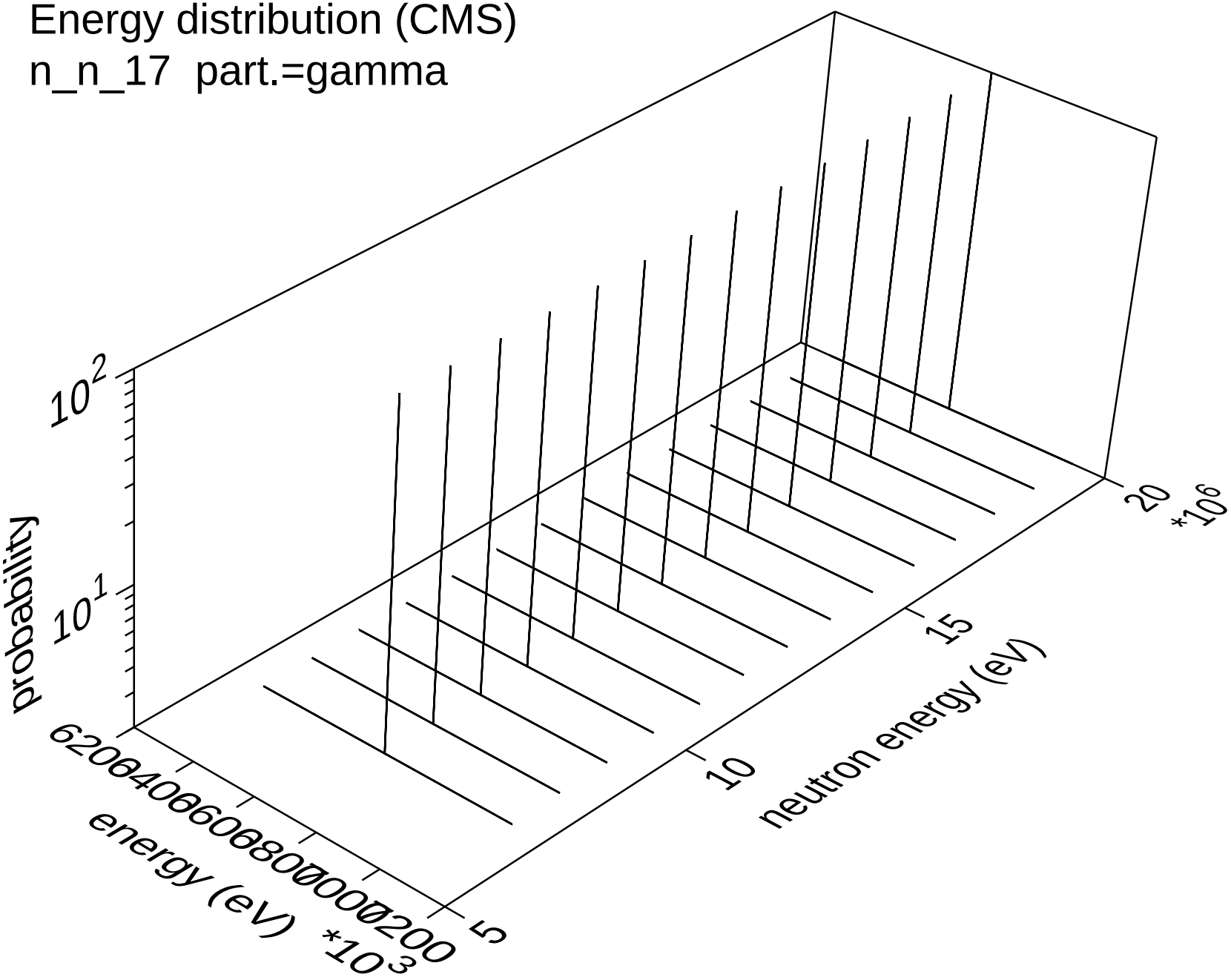

Energy distribution (CMS)
n_n_15 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_15 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

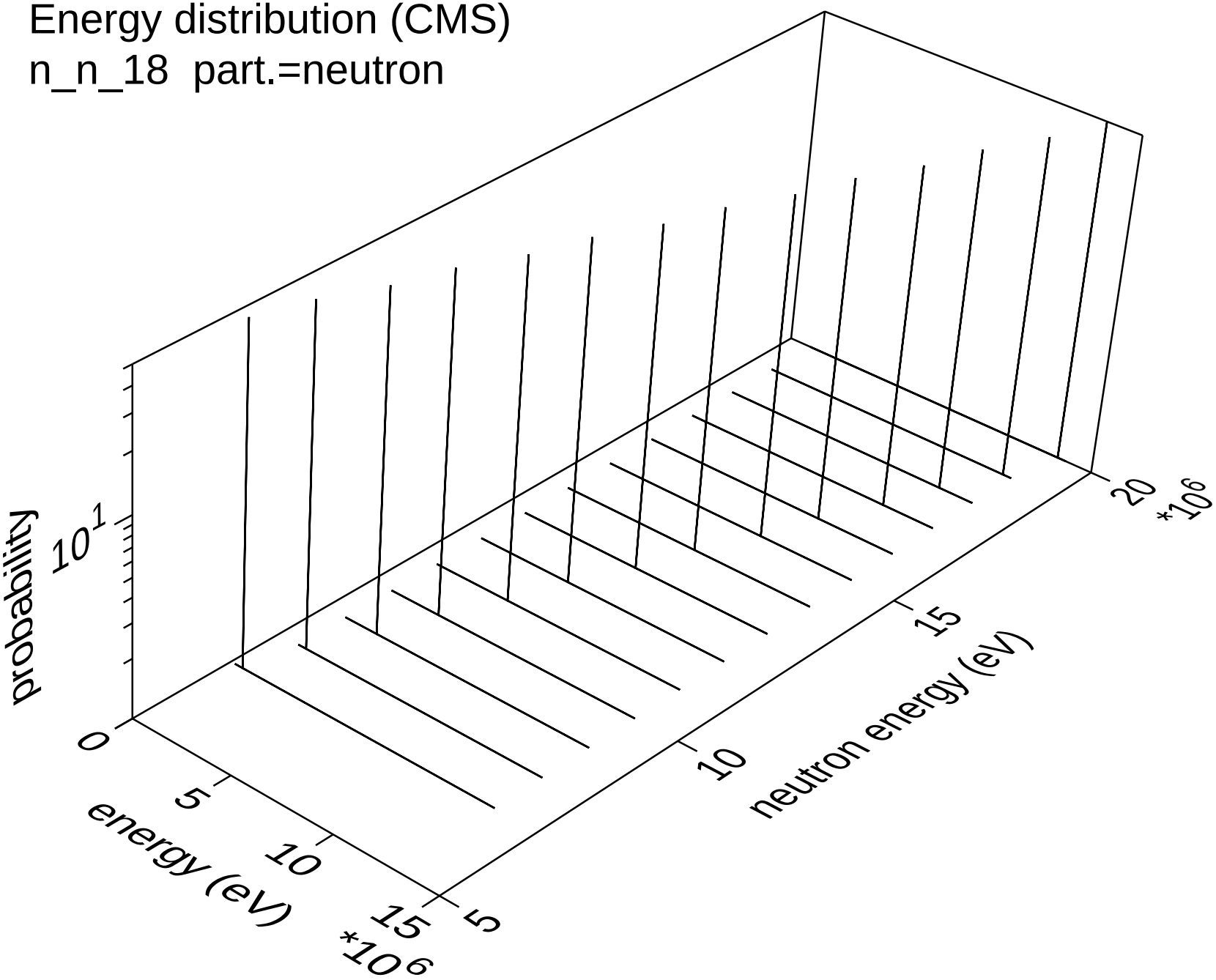

Energy distribution (CMS)
n_n_16 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

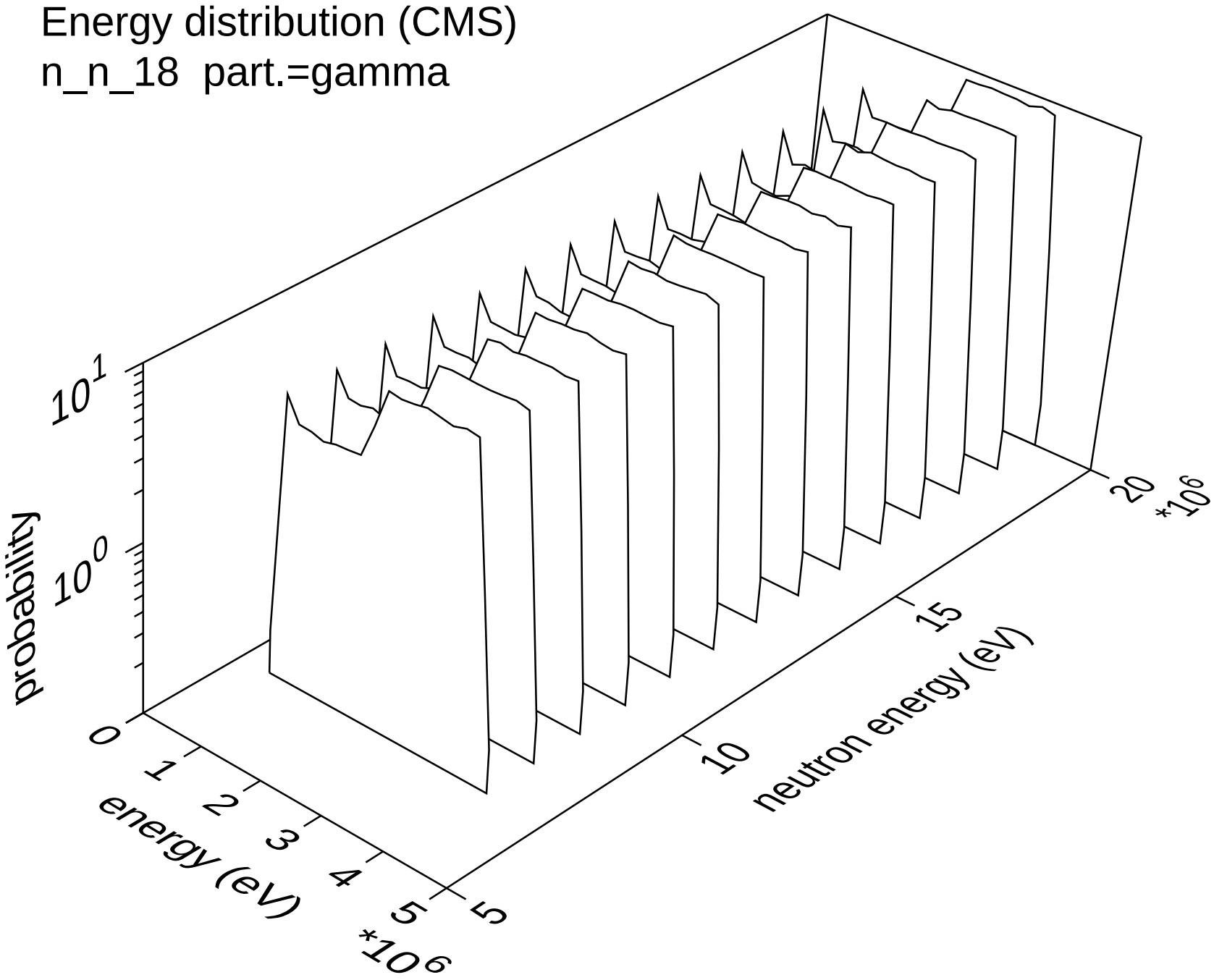

Energy distribution (CMS)
n_n_16 part.=gamma
probability
10^1
10^0
2
4
6
8
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

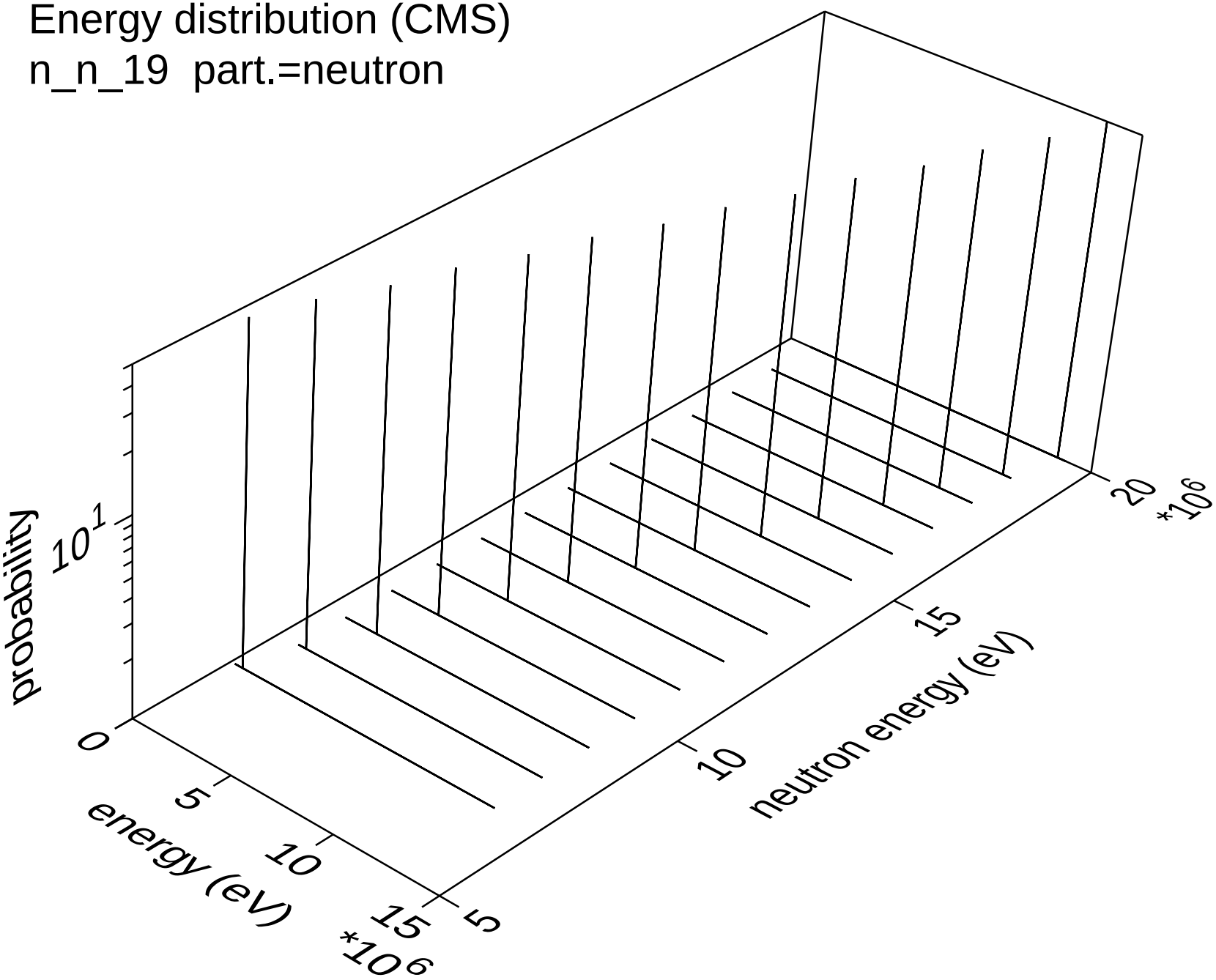

Energy distribution (CMS)
n_n_17 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

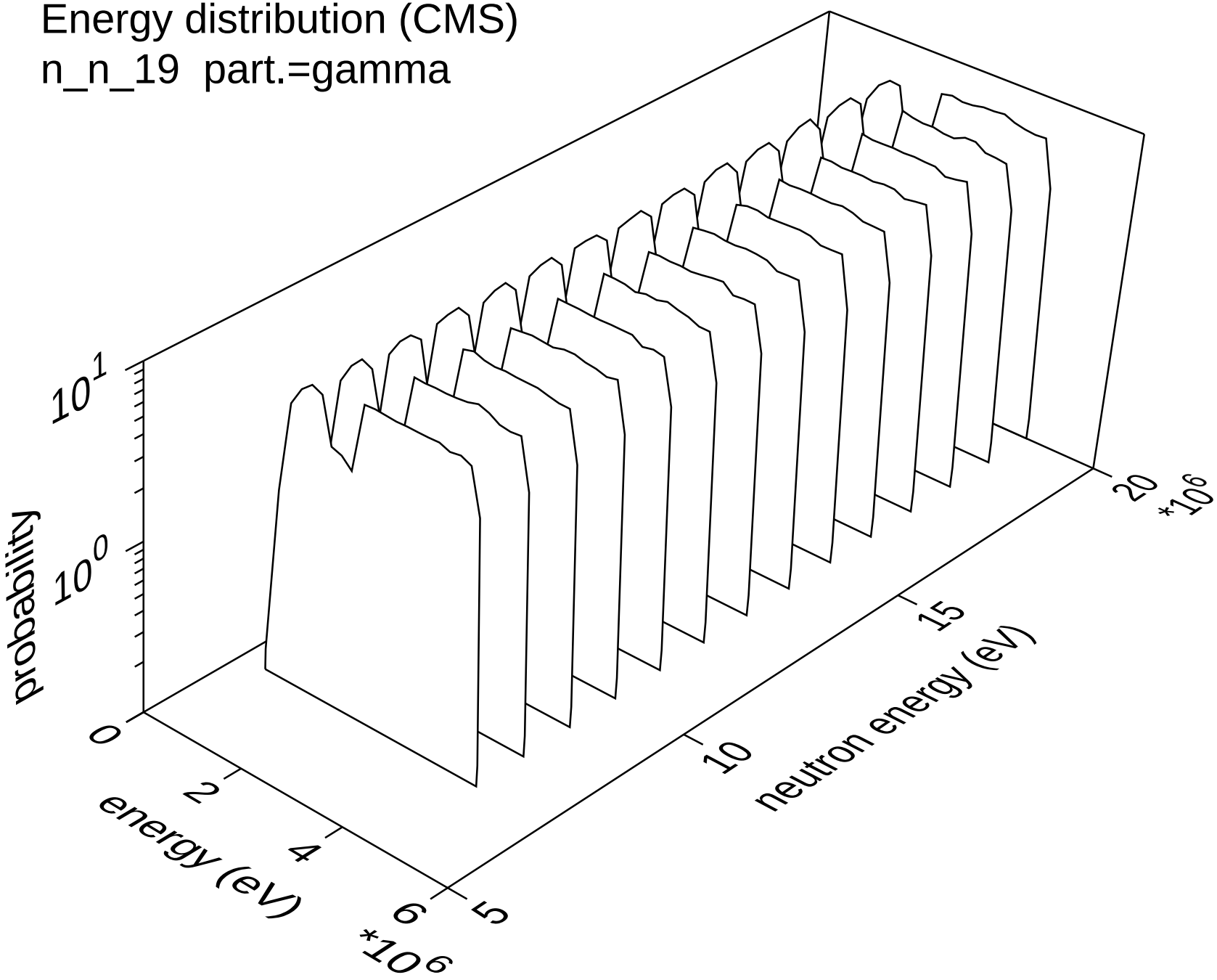


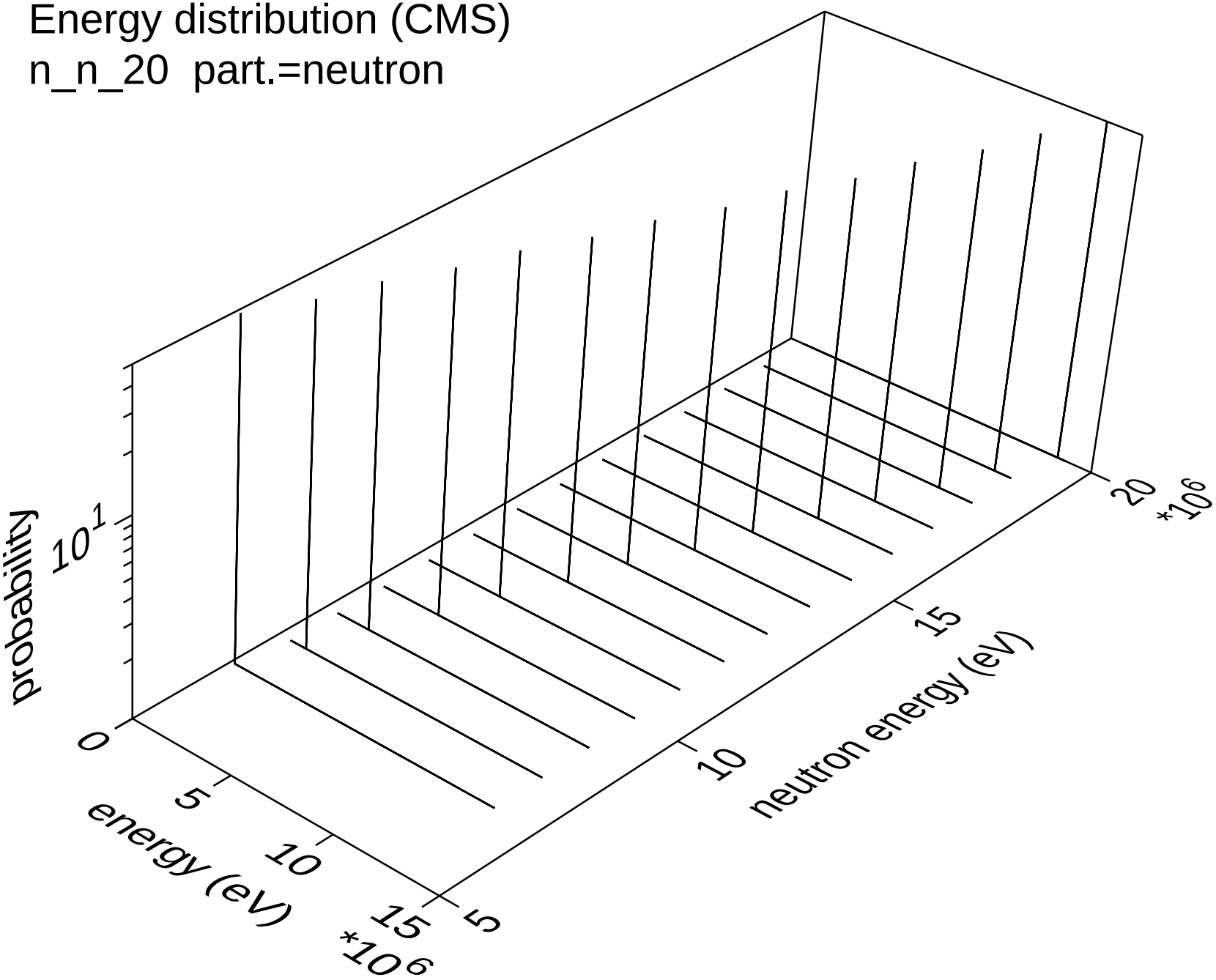
Energy distribution (CMS)
n_n_17 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
5
10
15
20
*10^6
neutron energy (eV)

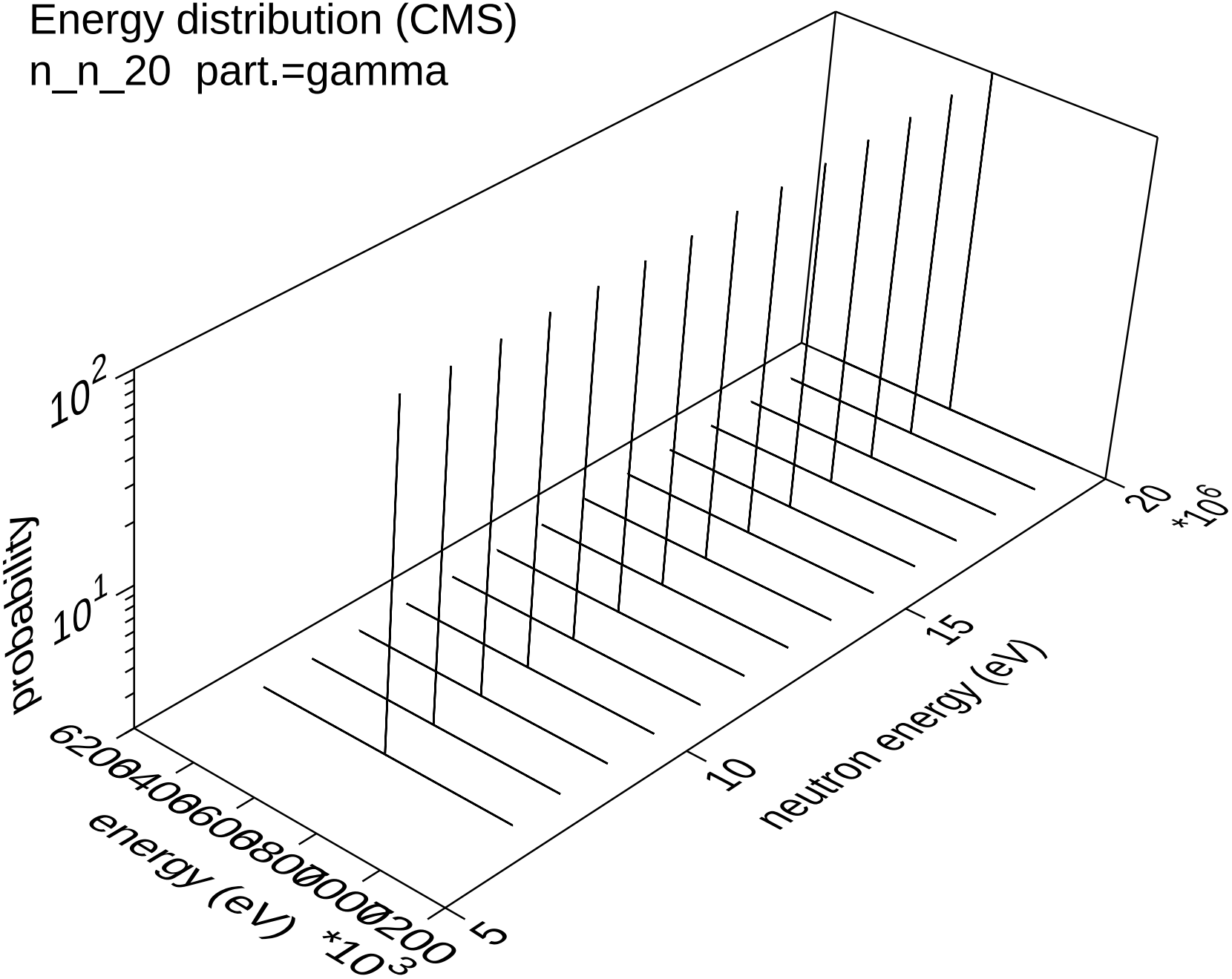

Energy distribution (CMS)
n_n_18 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_n_18 part.=gamma
probability
10^1
10^0
0
1
2
3
4
5
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

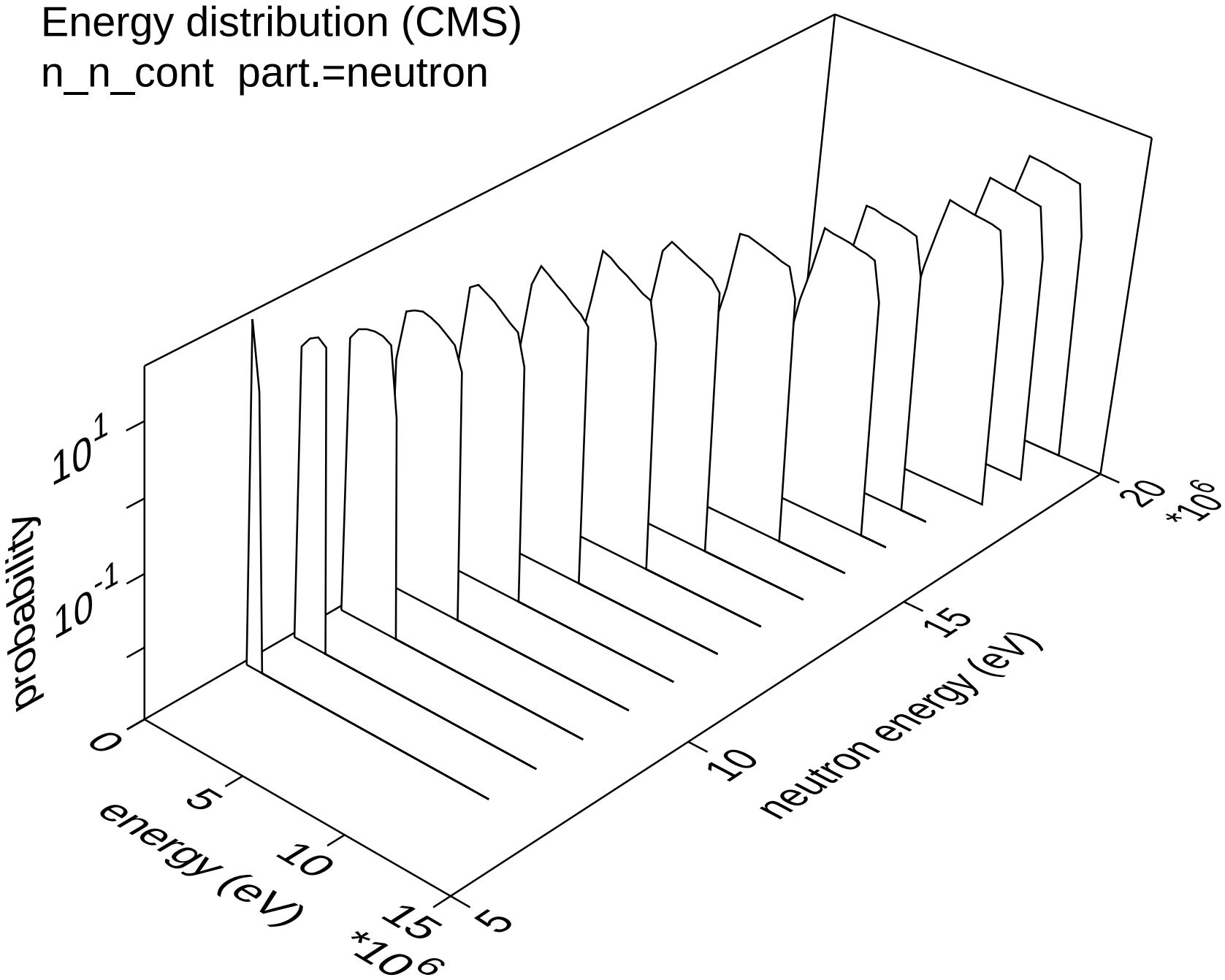

Energy distribution (CMS)
n_n_19 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

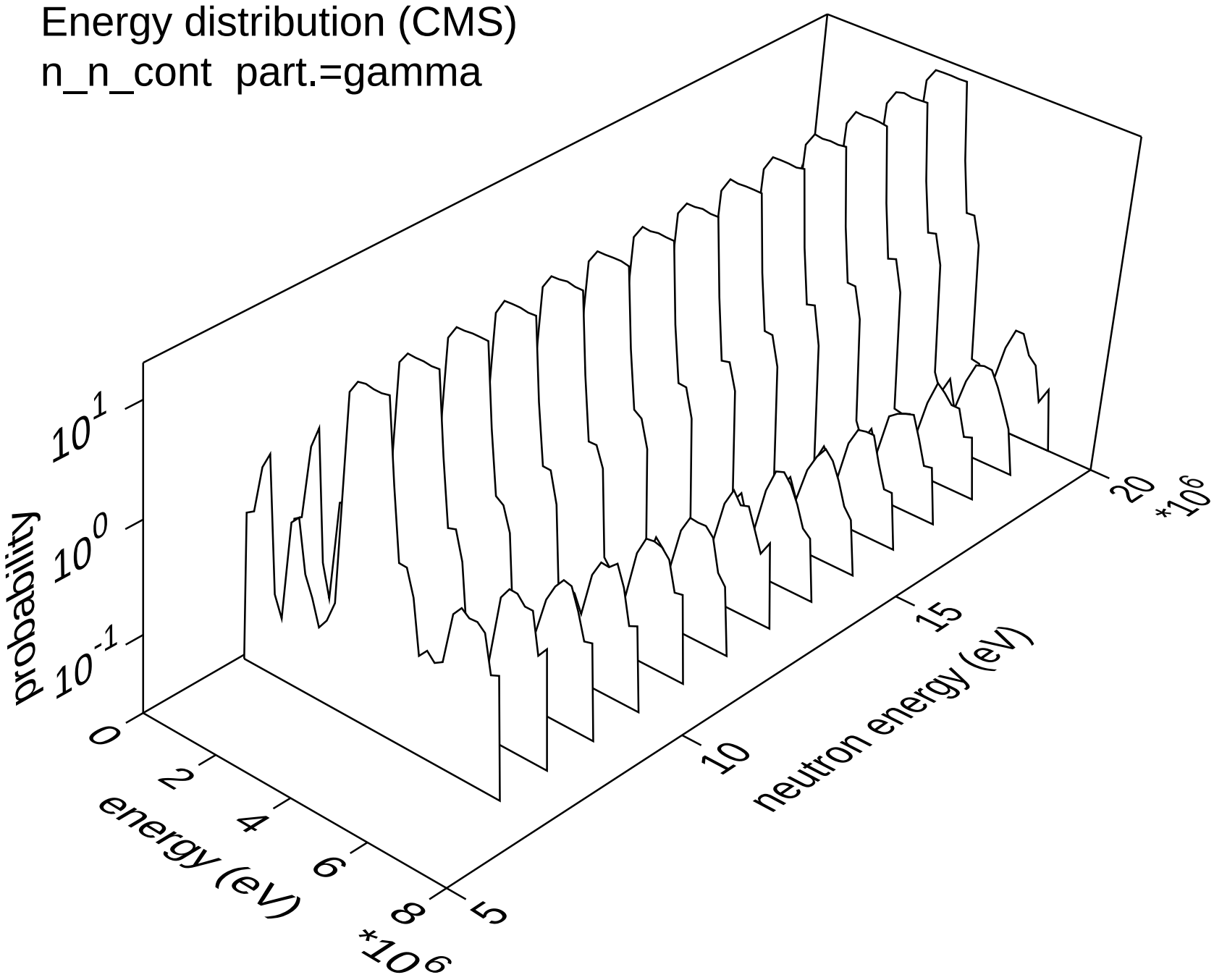

Energy distribution (CMS)
n_n_19 part.=gamma
probability
10^1
10^0
0
2
4
6
*10^6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

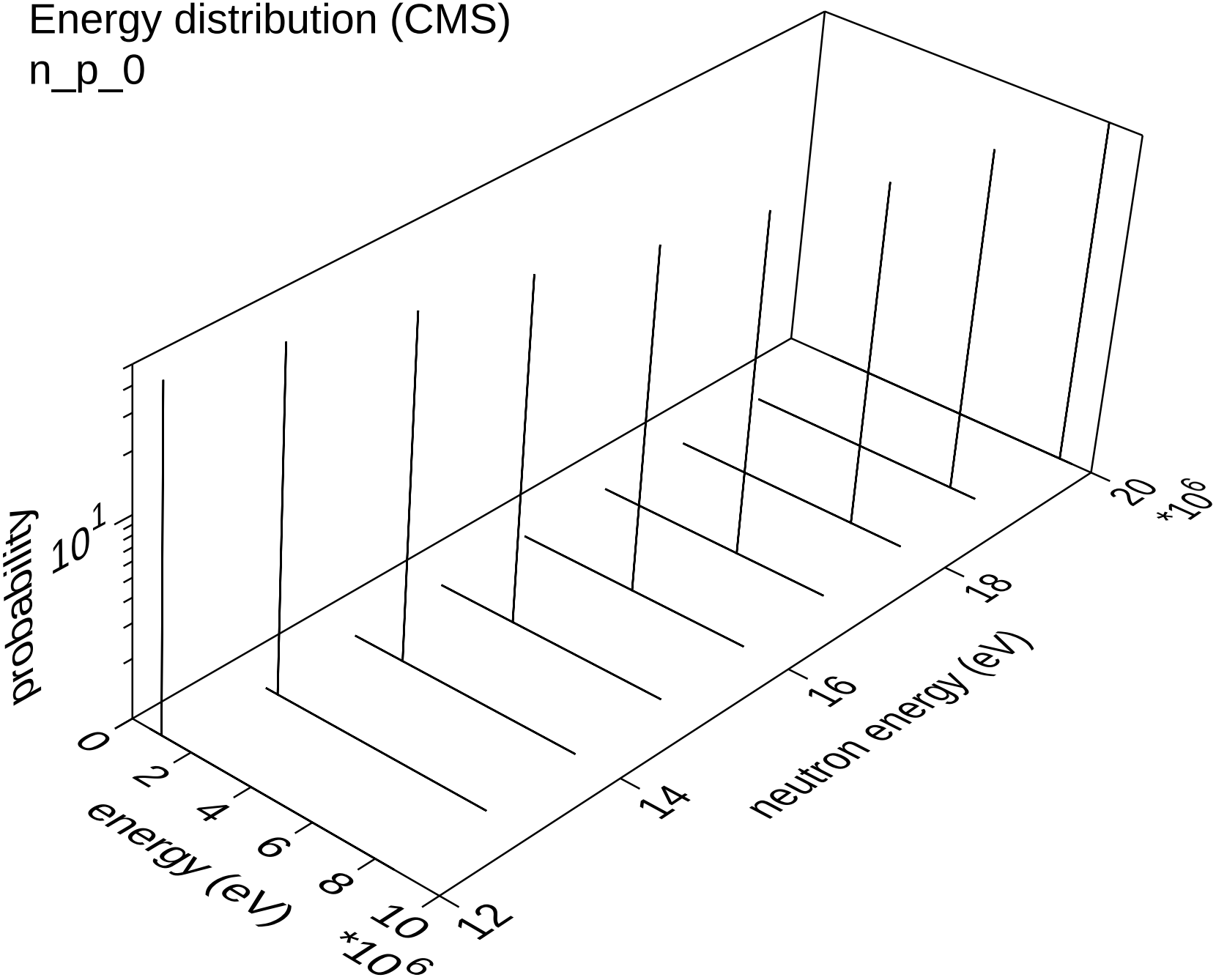

Energy distribution (CMS)
n_n_20 part.=neutron
probability
10^{1}
0
energy (eV)
5
10
15
*10^6
5
10
15
20
*10^6
neutron energy (eV)

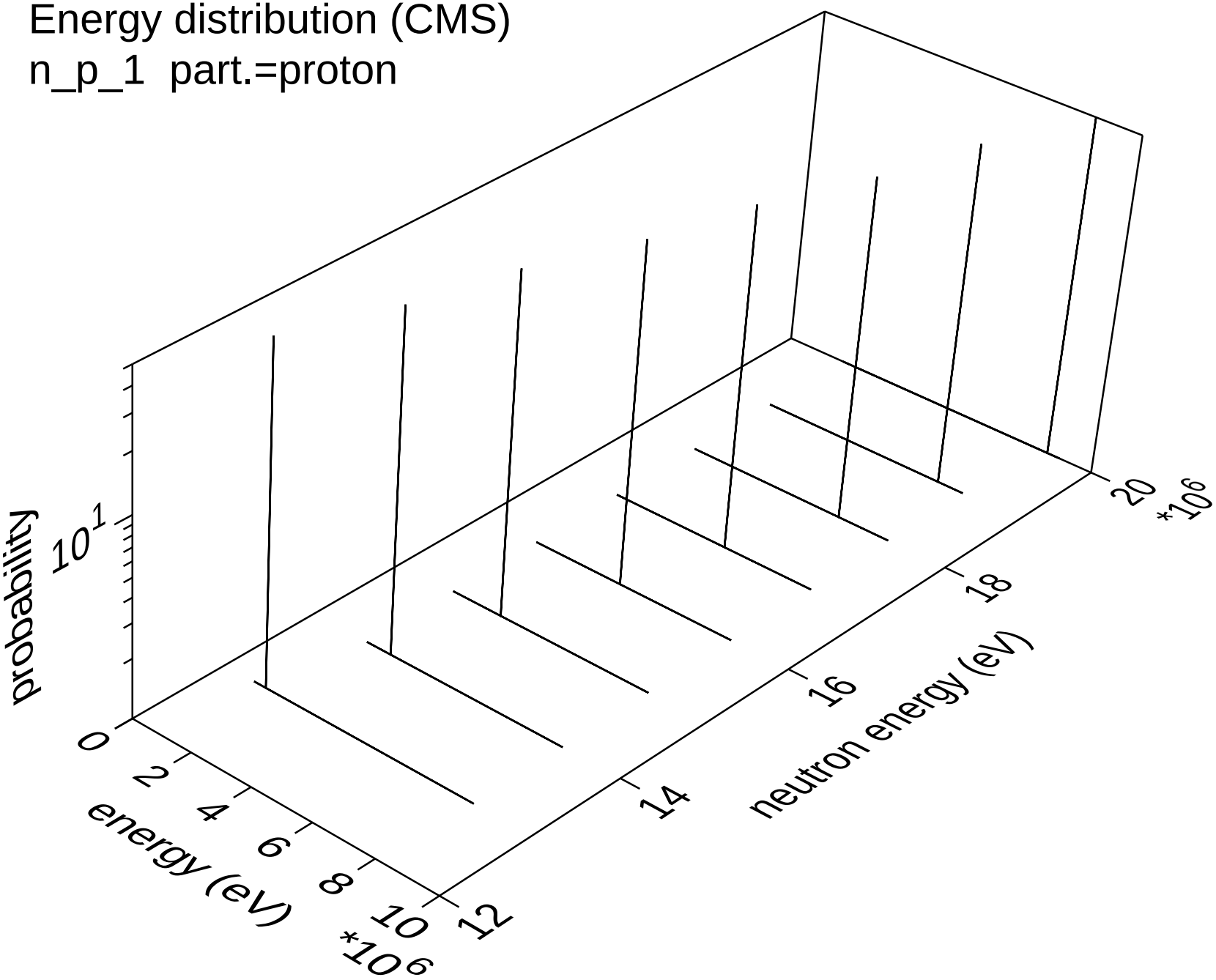


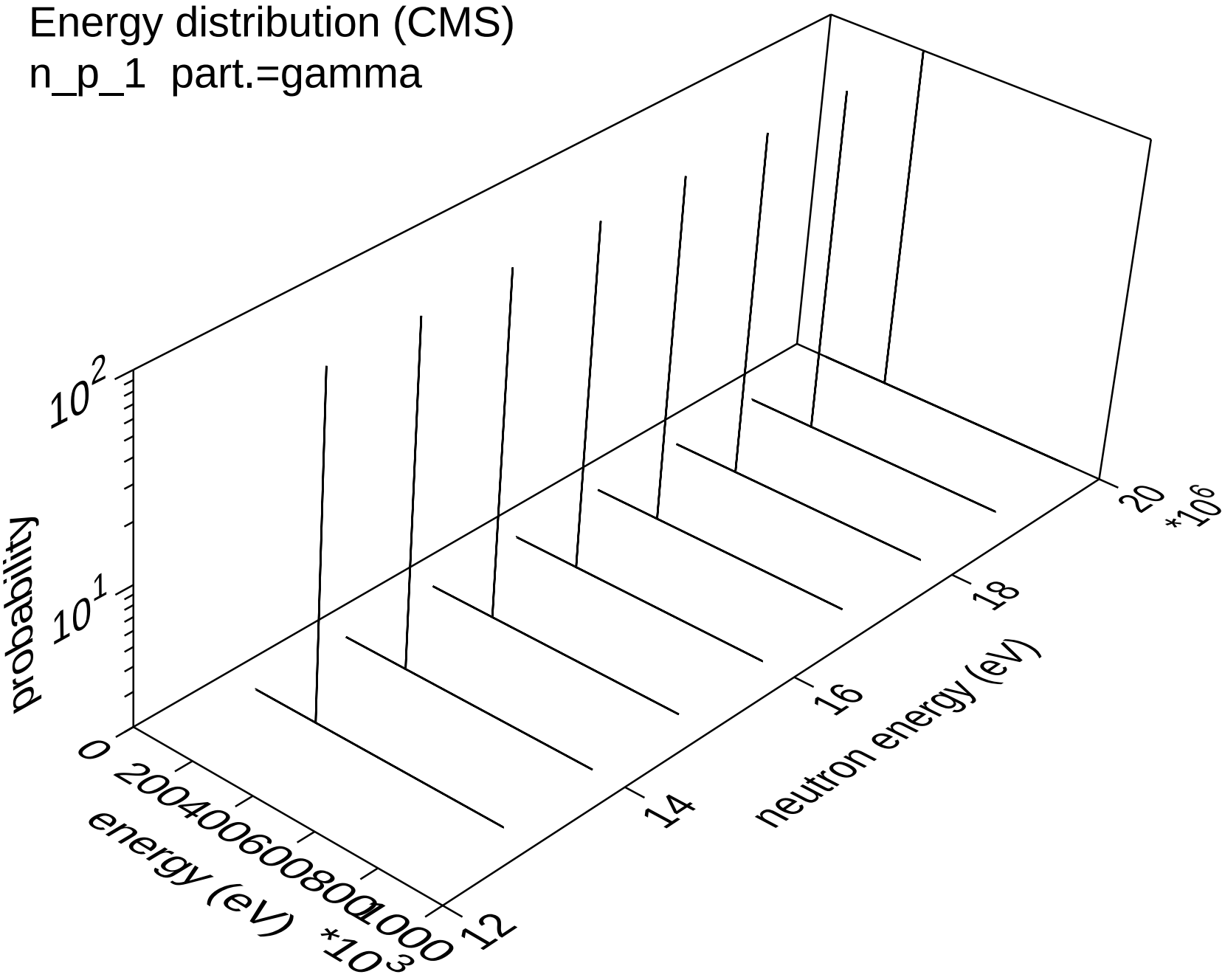
Energy distribution (CMS)
n_n_20 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
5
10
15
20
*10^6
neutron energy (eV)

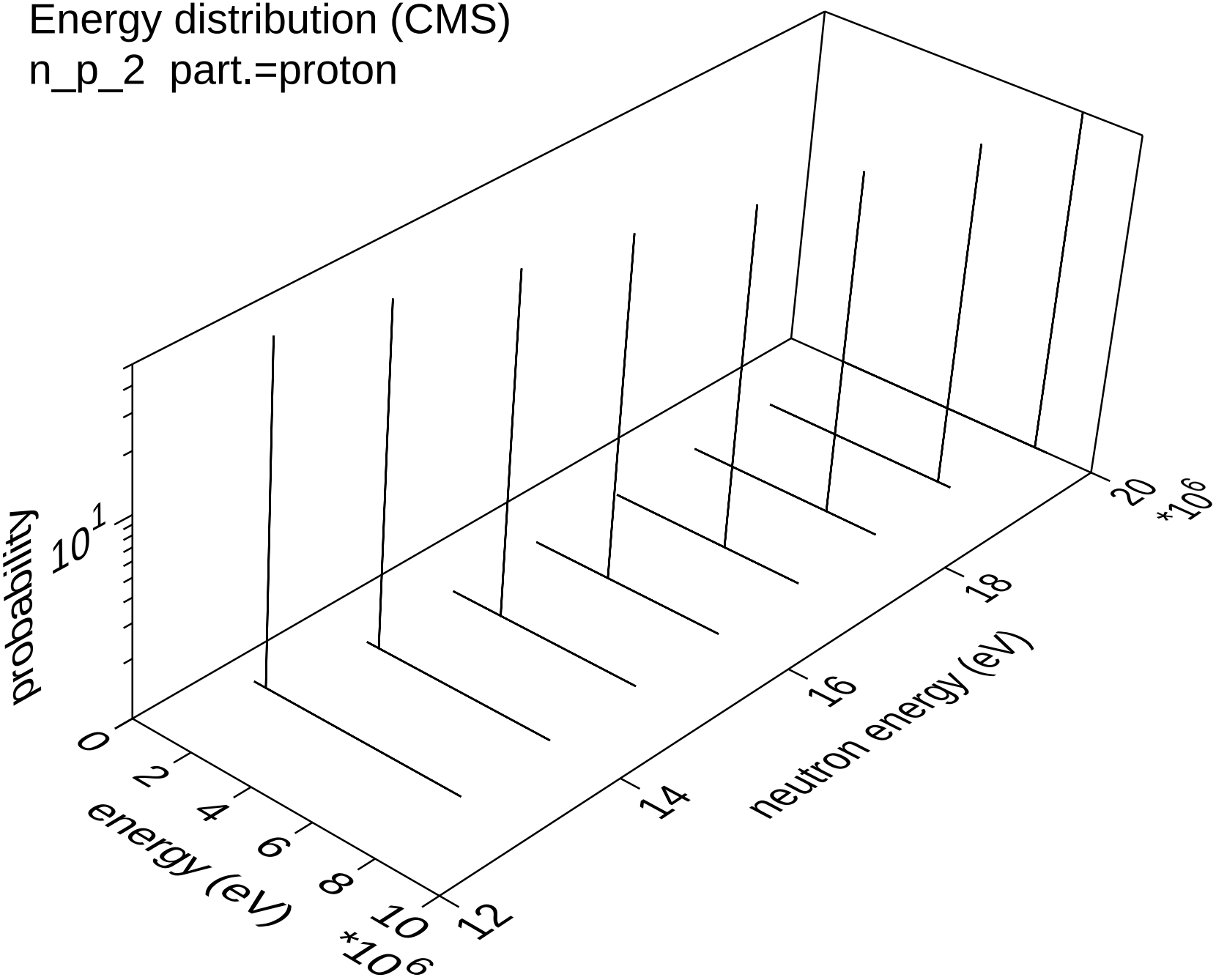

Energy distribution (CMS)
n_n_cont part.=neutron
probability
10^{1}
10^{-1}
0
5
10
15
energy (eV)
*10^6
5
10
15
20
neutron energy (eV)
*10^6

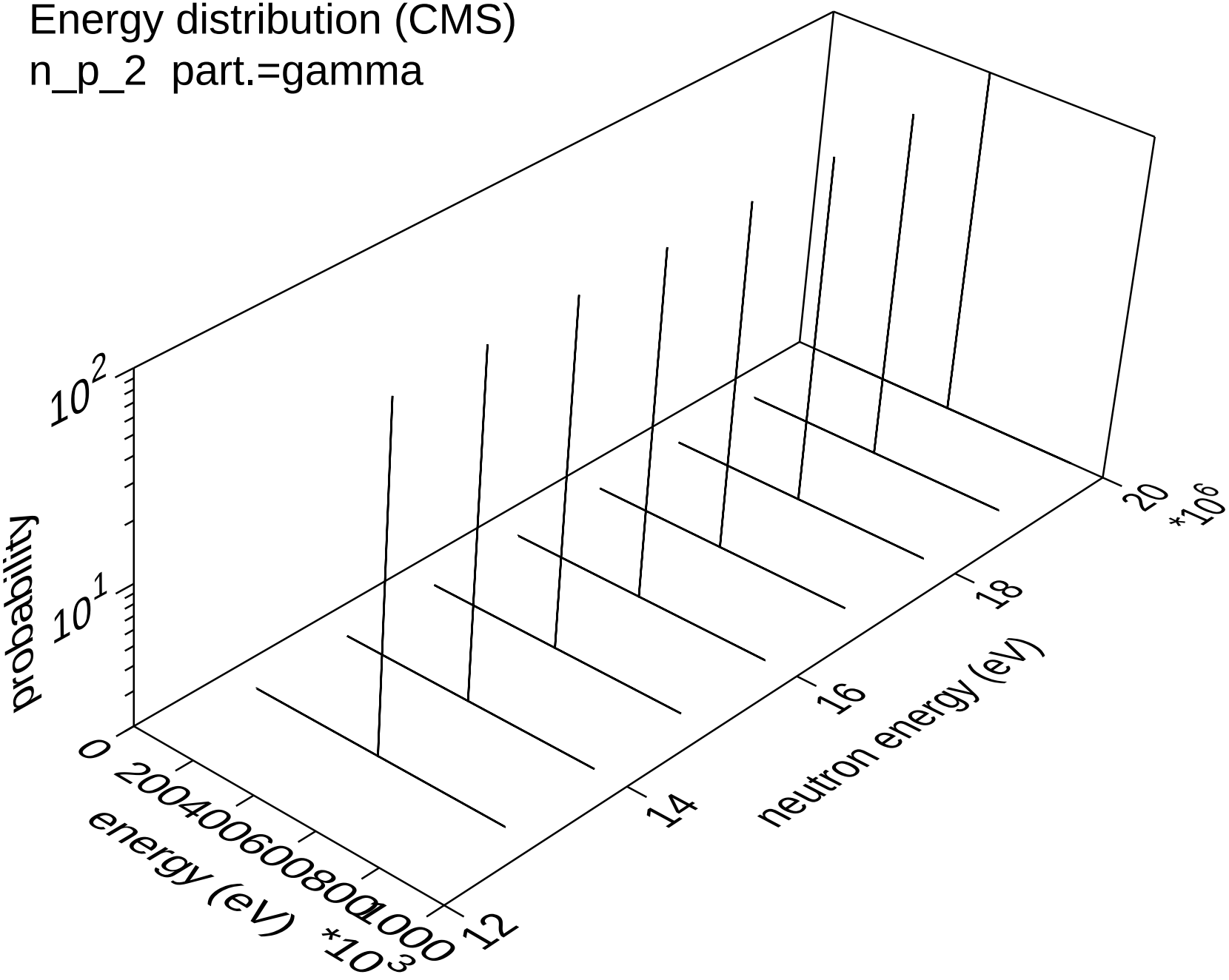

Energy distribution (CMS)
n_n_cont part.=gamma
probability
10^{1}
10^{0}
10^{-1}
0
2
4
6
8
*10 6
energy (eV)
5
10
15
20
*10^6
neutron energy (eV)

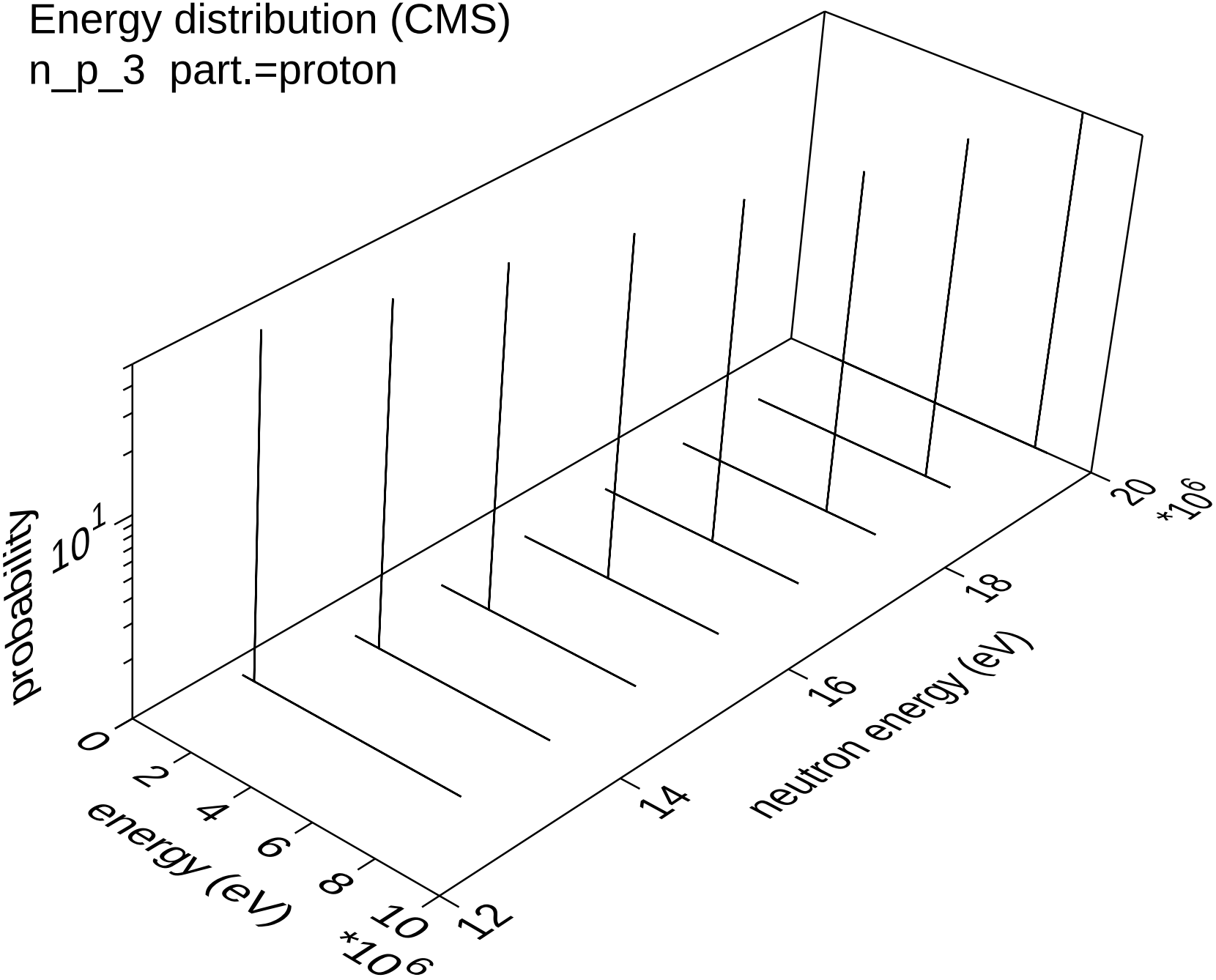

Energy distribution (CMS)
n_p_0
probability
10^{-1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

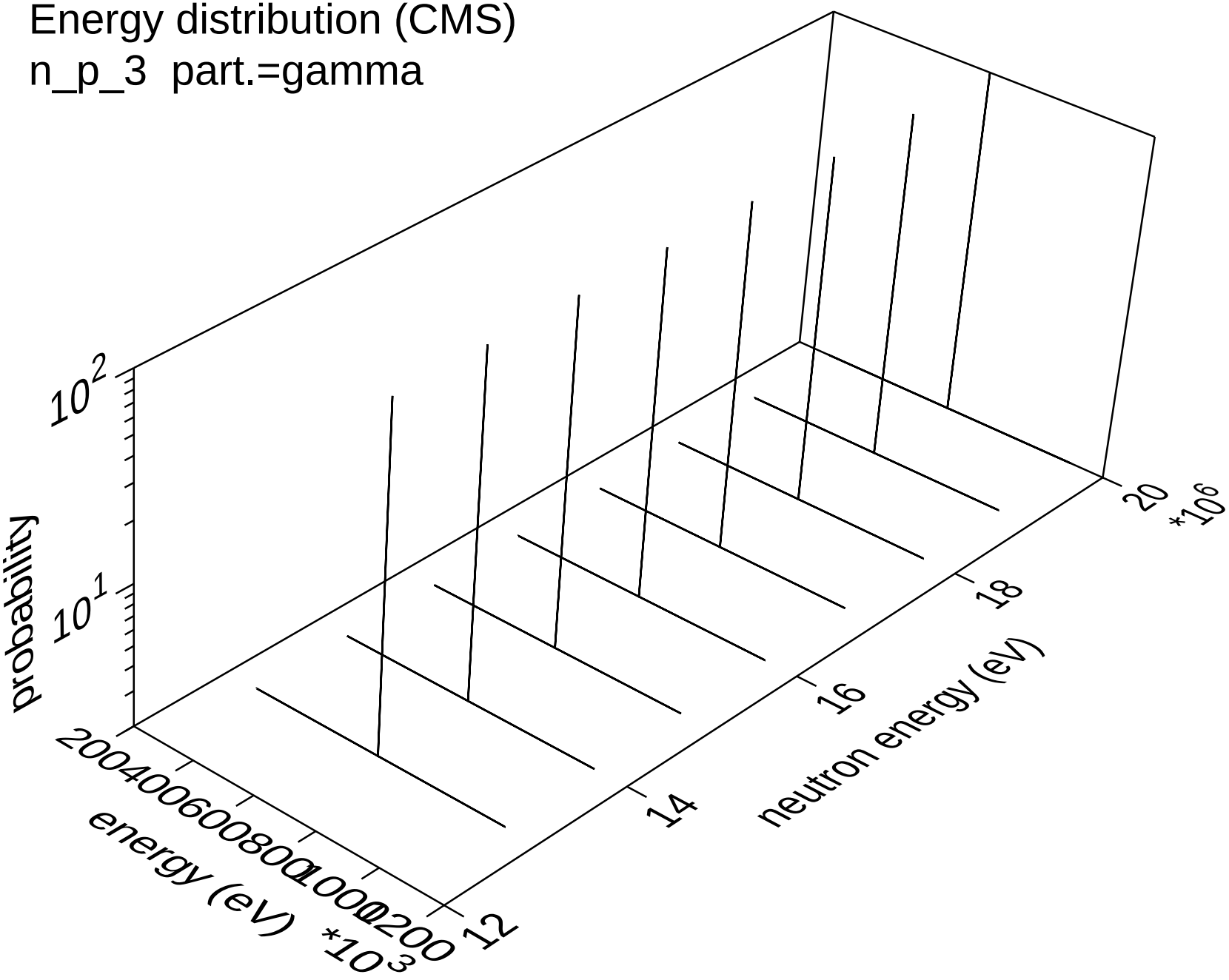

Energy distribution (CMS)
n_p_1 part.=proton
probability
10^{-1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

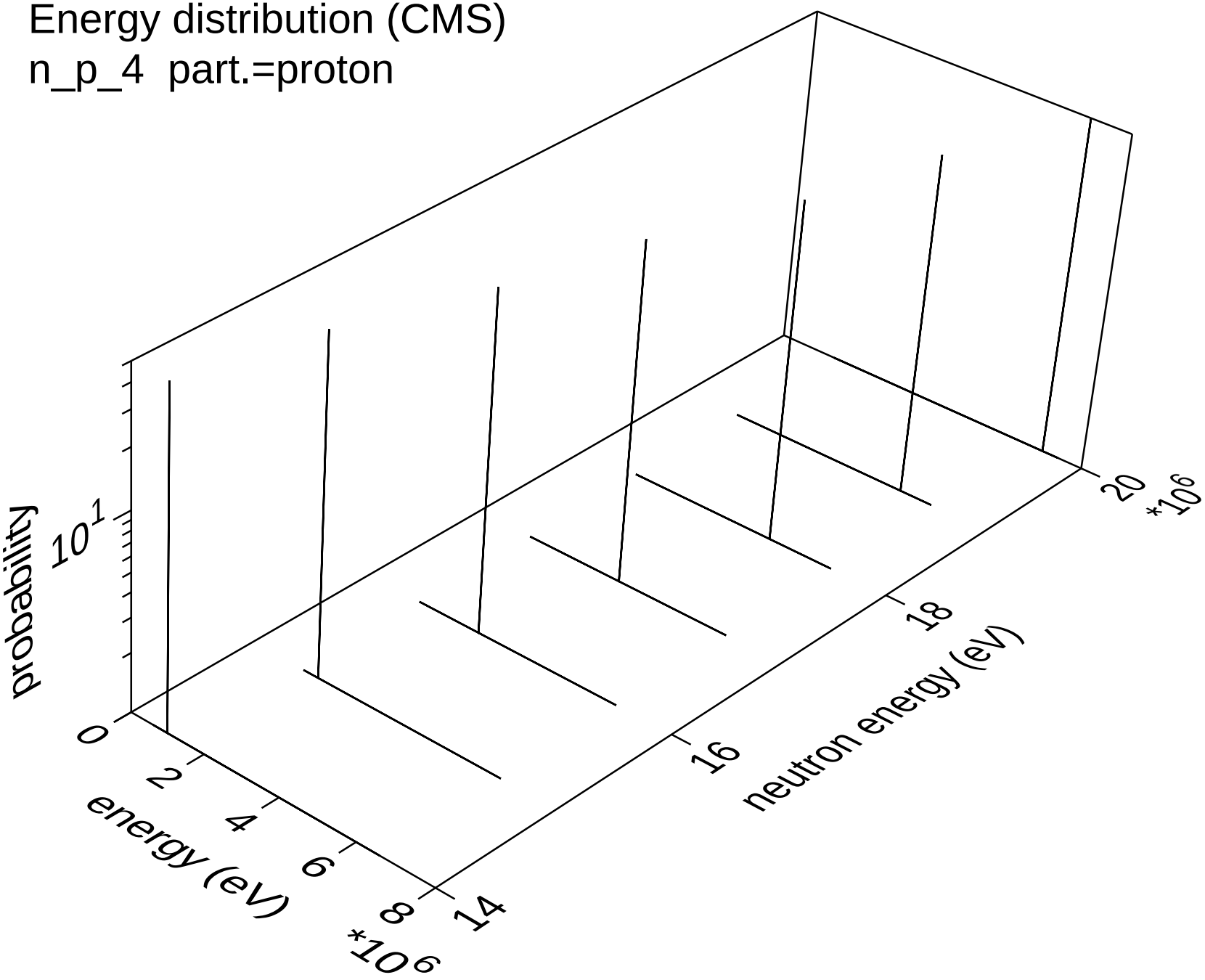

Energy distribution (CMS)
n_p_1 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
12
14
16
18
20
$*10^6$
neutron energy (eV)
energy (eV) $*10^3$

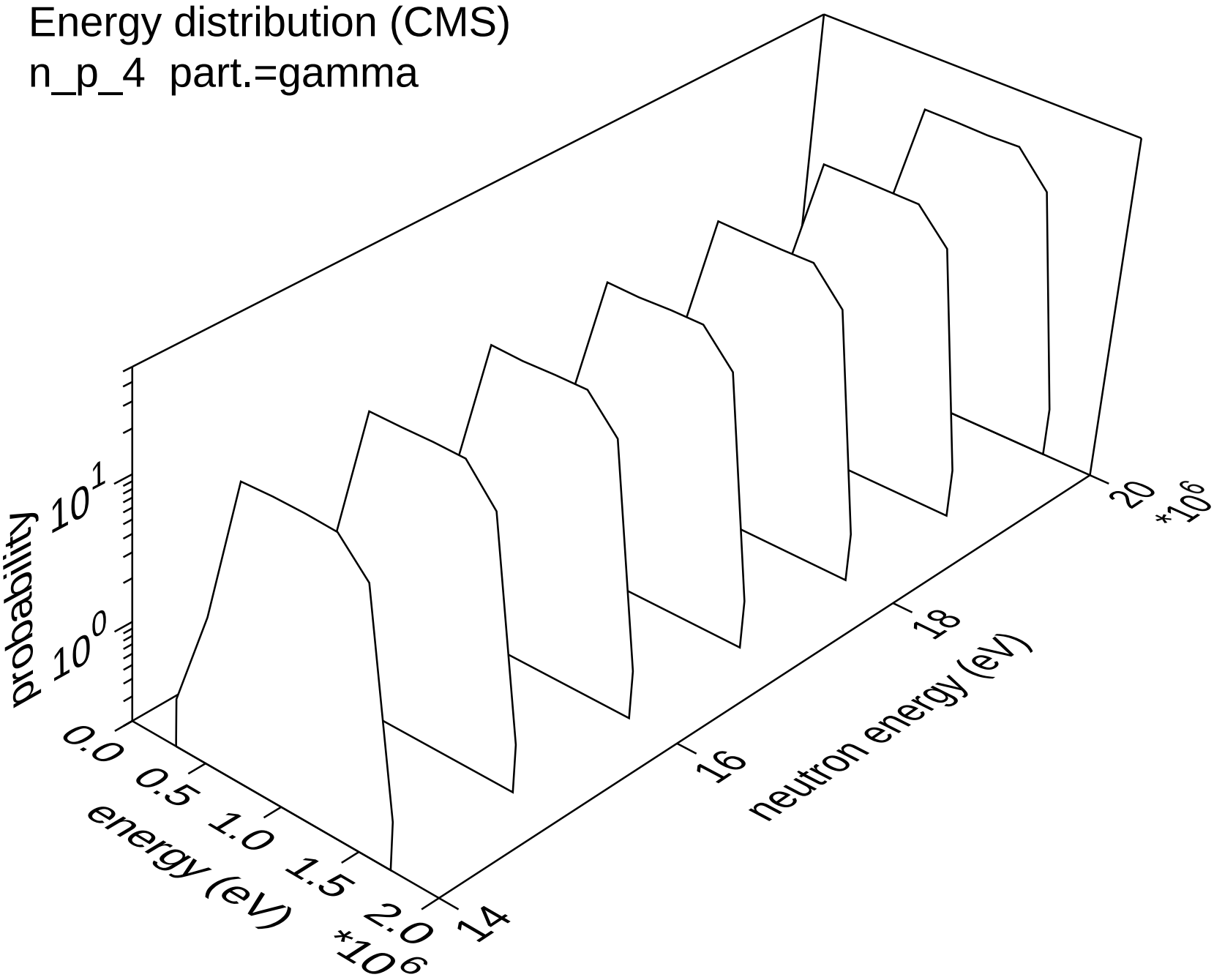

Energy distribution (CMS)
n_p_2 part.=proton
probability
10^{1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

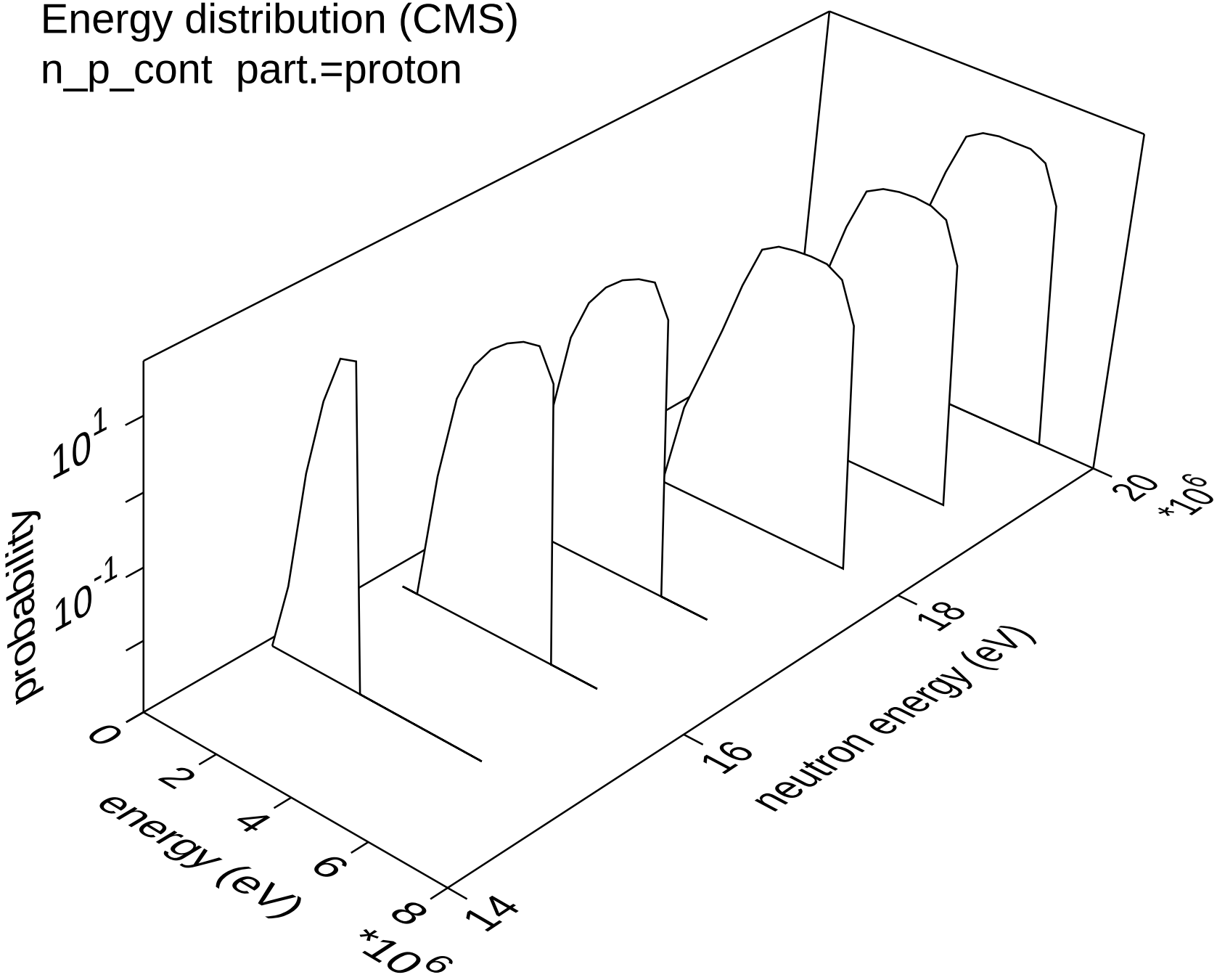

Energy distribution (CMS)
n_p_2 part.=gamma
probability
10^2
10^1
0
2
4
6
8
10
12
energy (eV) *10^3
14
16
18
20
*10^6
neutron energy (eV)

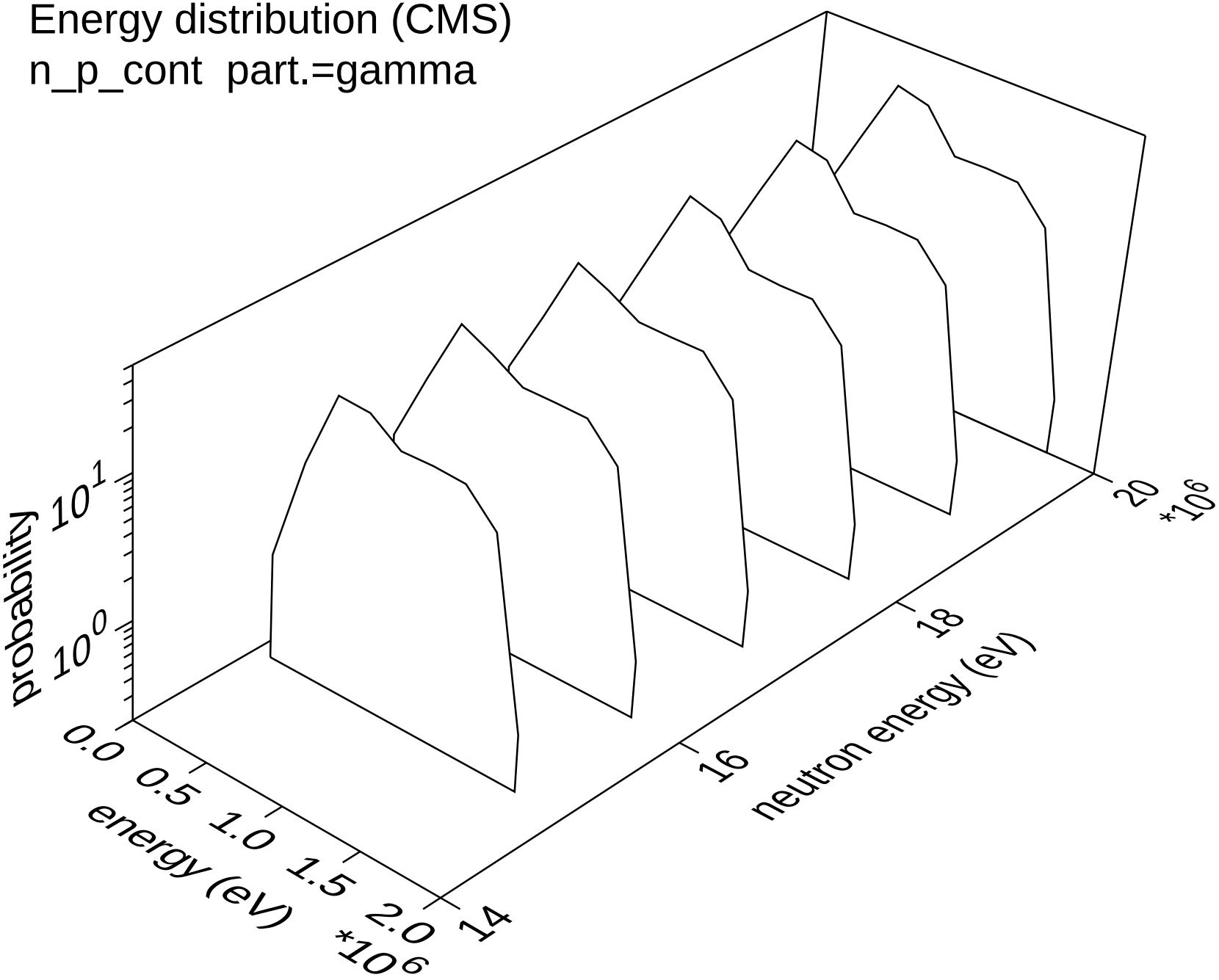

Energy distribution (CMS)
n_p_3 part.=proton
probability
10^{-1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

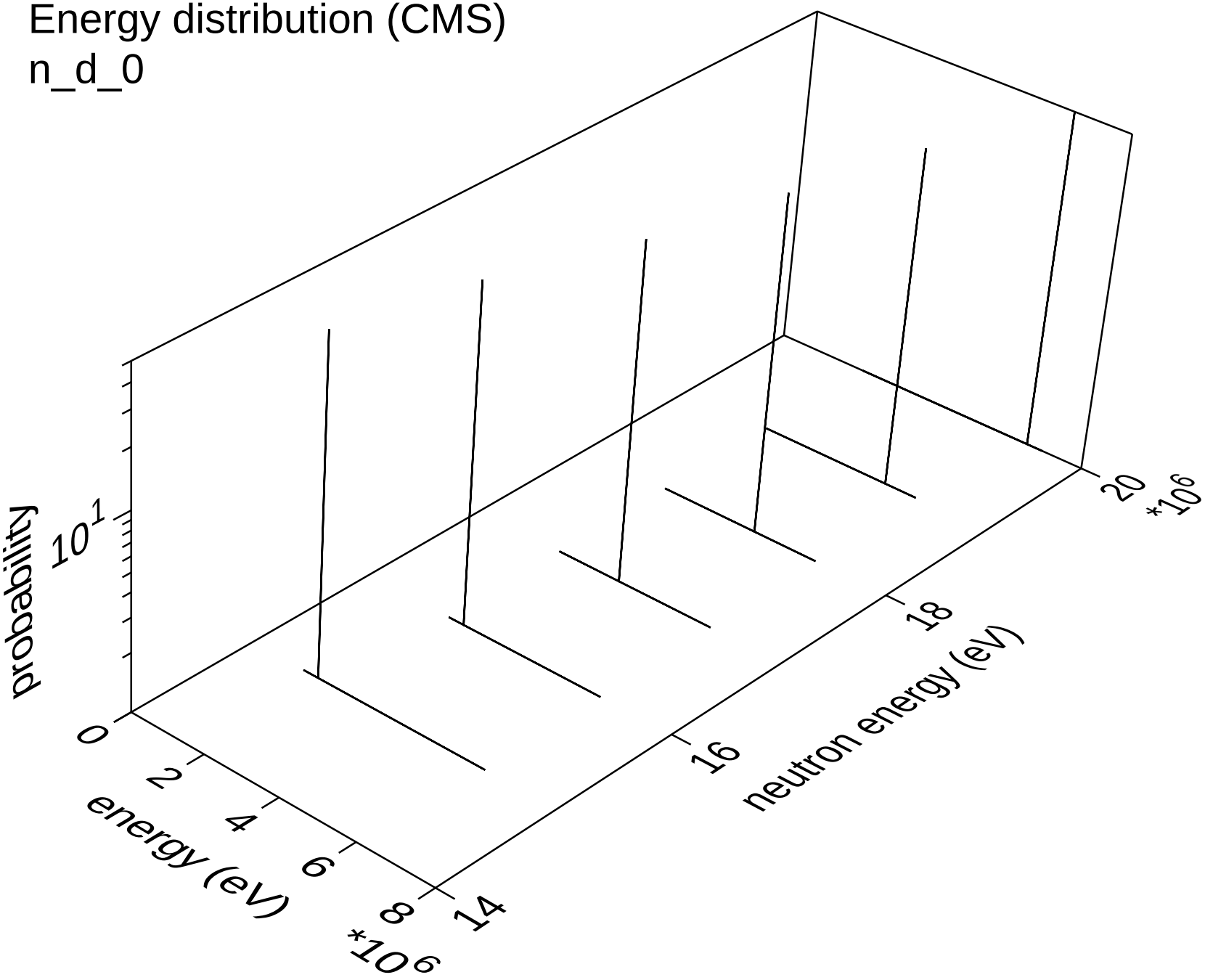

Energy distribution (CMS)
n_p_3 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
200
400
600
800
1000
1200
neutron energy (eV)
12
14
16
18
20
*10^6

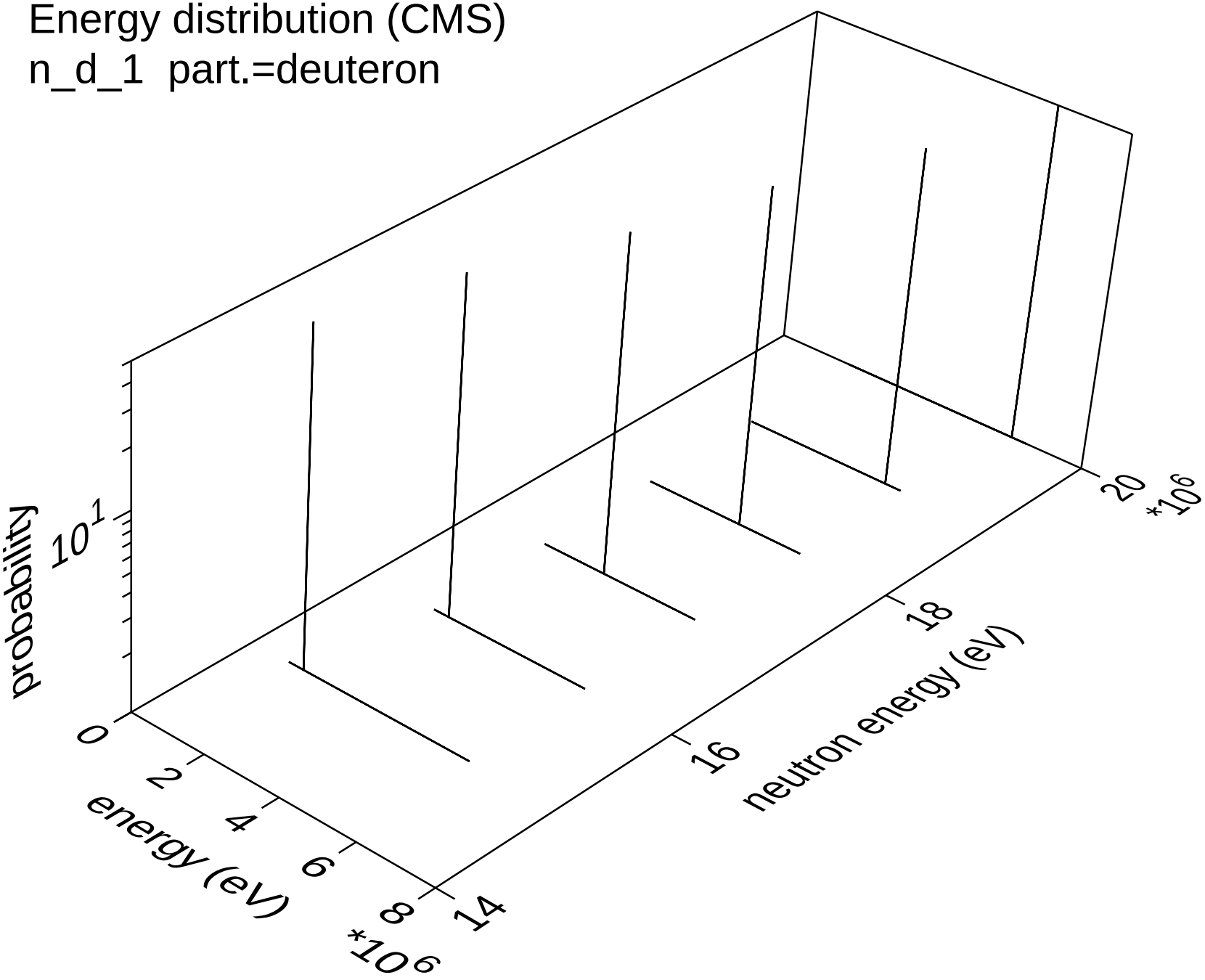

Energy distribution (CMS)
n_p_4 part.=proton
probability
10^{1}
0
energy (eV)
2
4
6
8
*10 6
14
16
neutron energy (eV)
18
20
*10^6

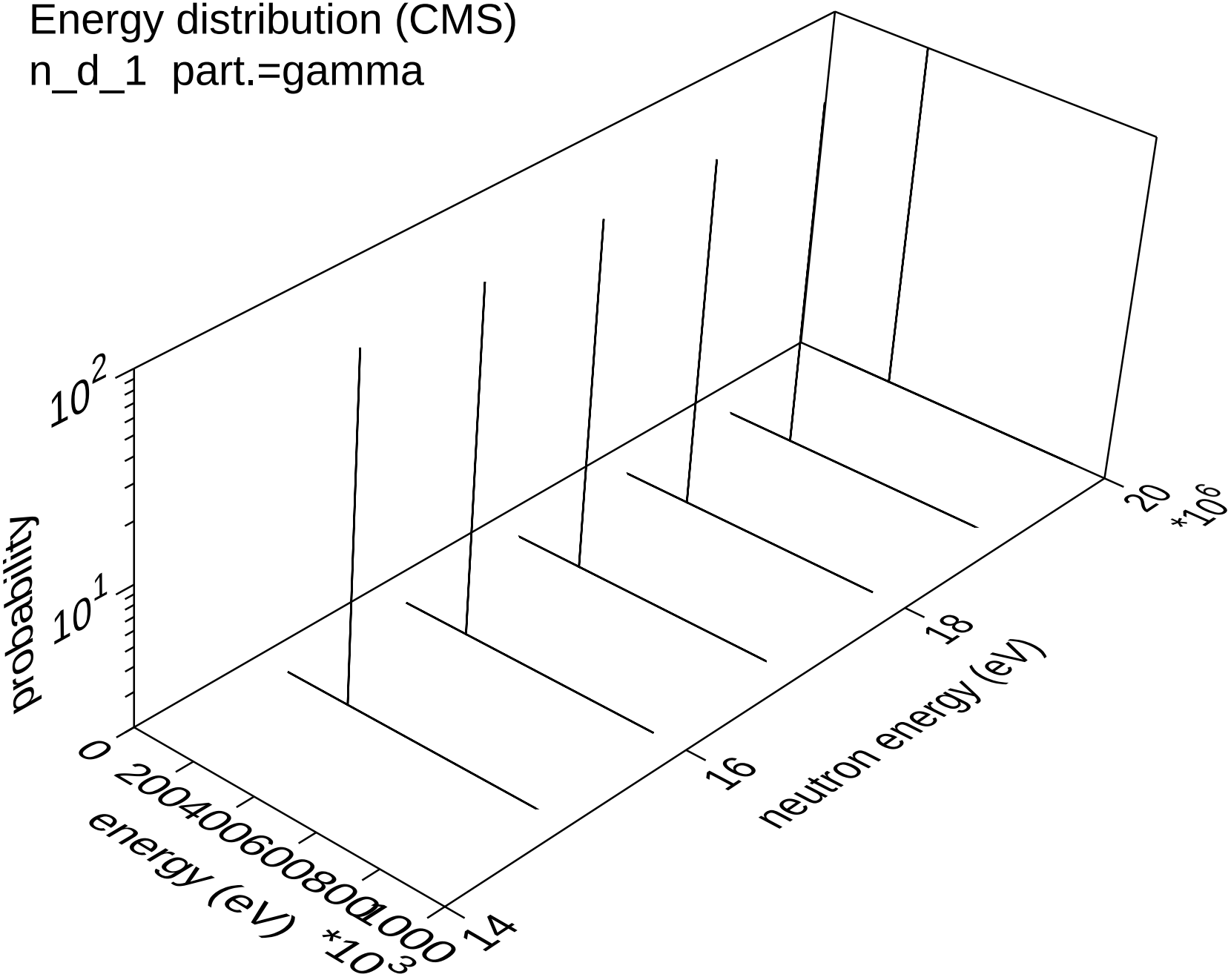

Energy distribution (CMS)
n_p_4 part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)

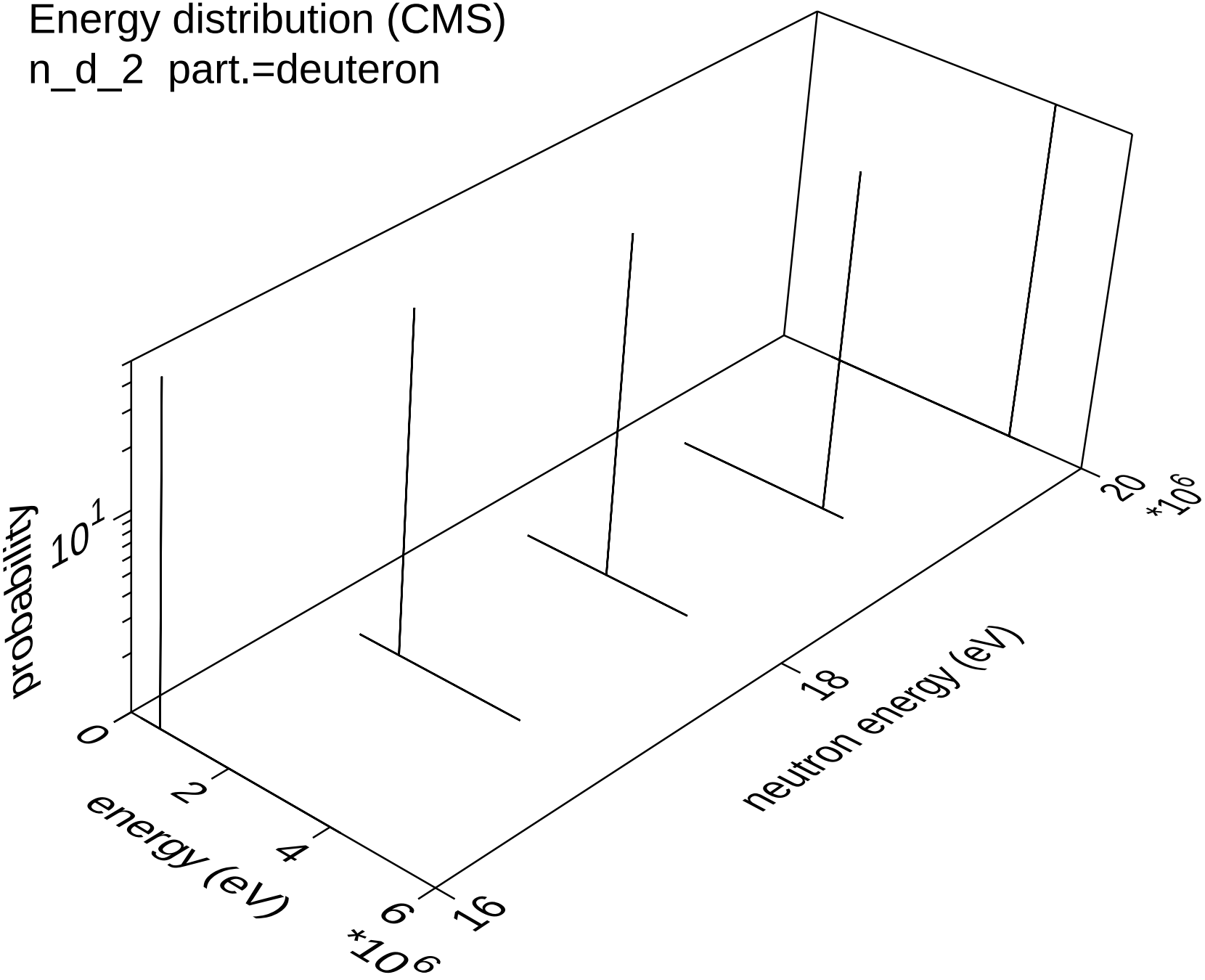

Energy distribution (CMS)
n_p_cont part.=proton
probability
10^{1}
10^{-1}
0
2
4
6
8
*10 6
energy (eV)
14
16
18
20
*10⁶
neutron energy (eV)

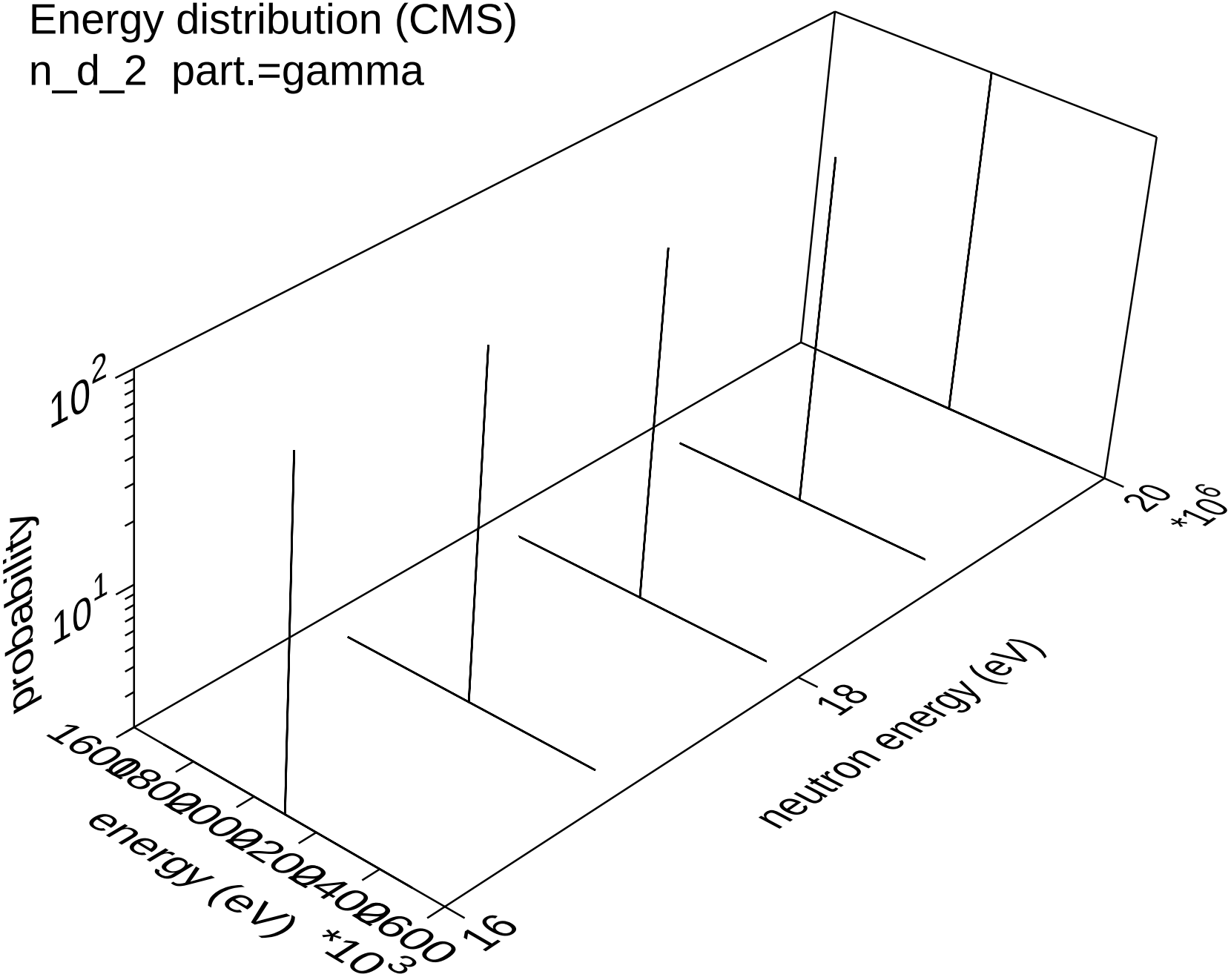

Energy distribution (CMS)
n_p_cont part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
2.0
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_d_0
probability
10^{1}
0
energy (eV)
2
4
6
8
*10 6
14
16
neutron energy (eV)
18
20
*10^6

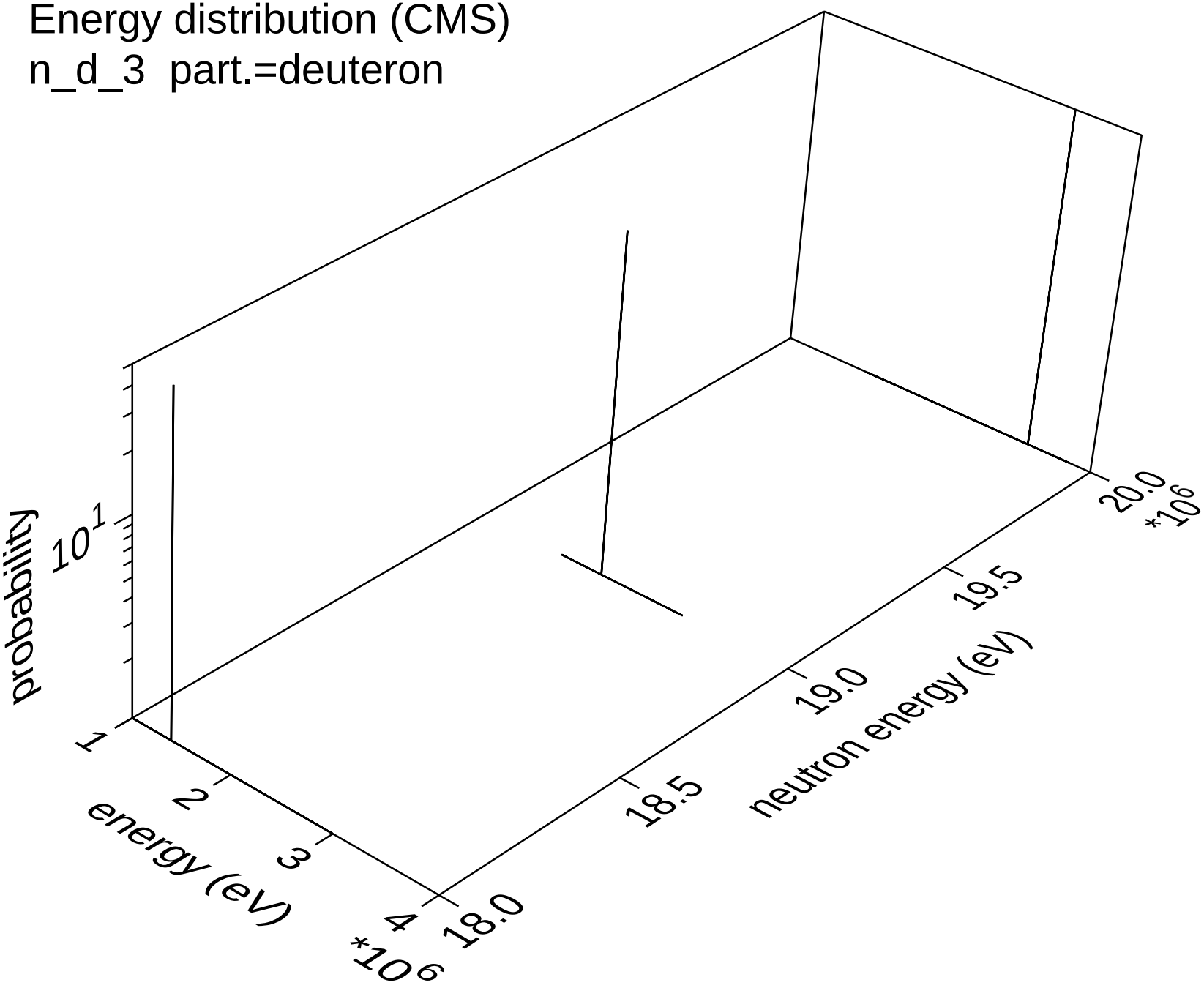

Energy distribution (CMS)
n_d_1 part.=deuteron
probability
10^{1}
0
energy (eV)
2
4
6
8
*10 6
14
16
neutron energy (eV)
18
20
*10^6

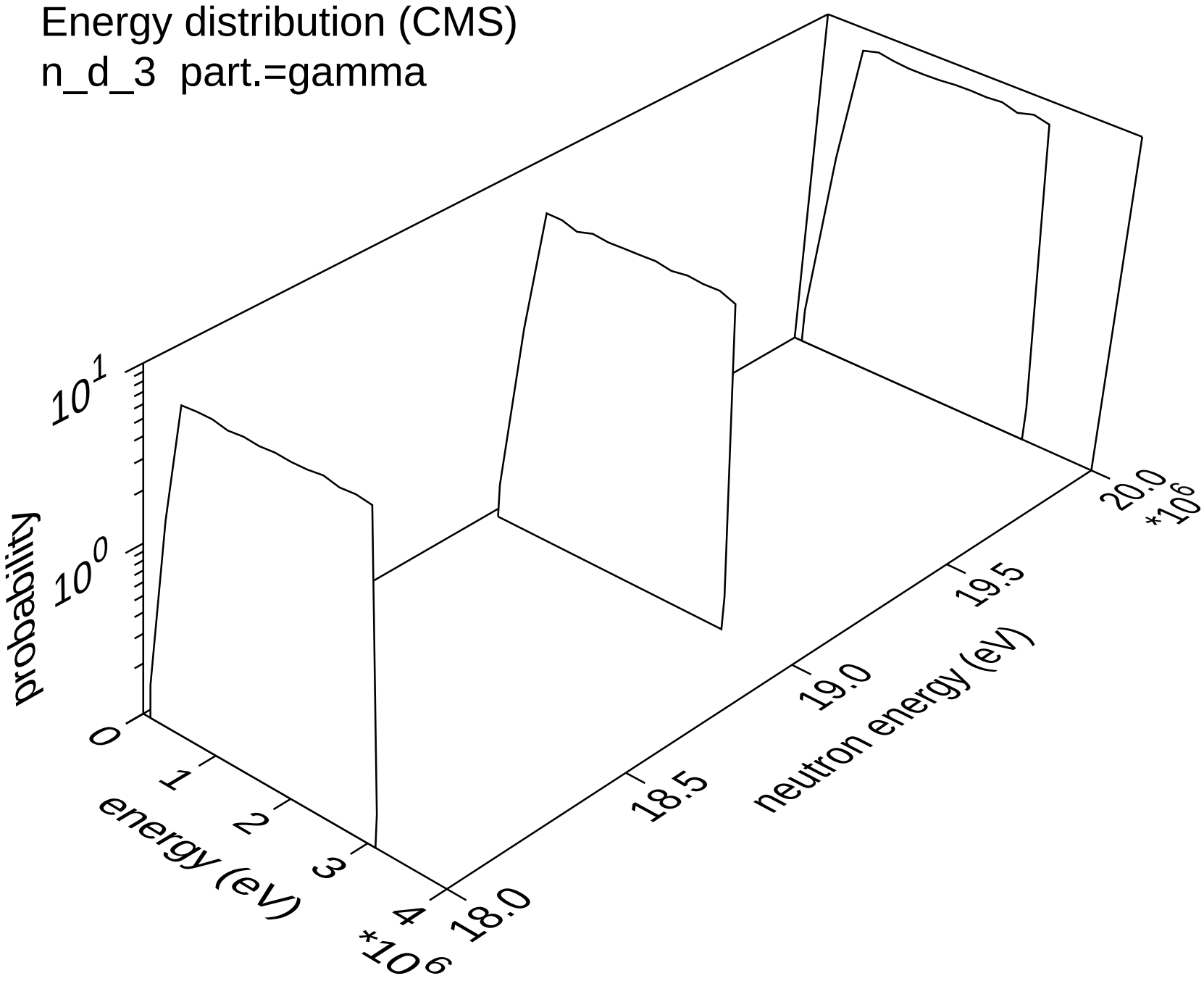

Energy distribution (CMS)
n_d_1 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
14
16
18
20
neutron energy (eV) *10^6

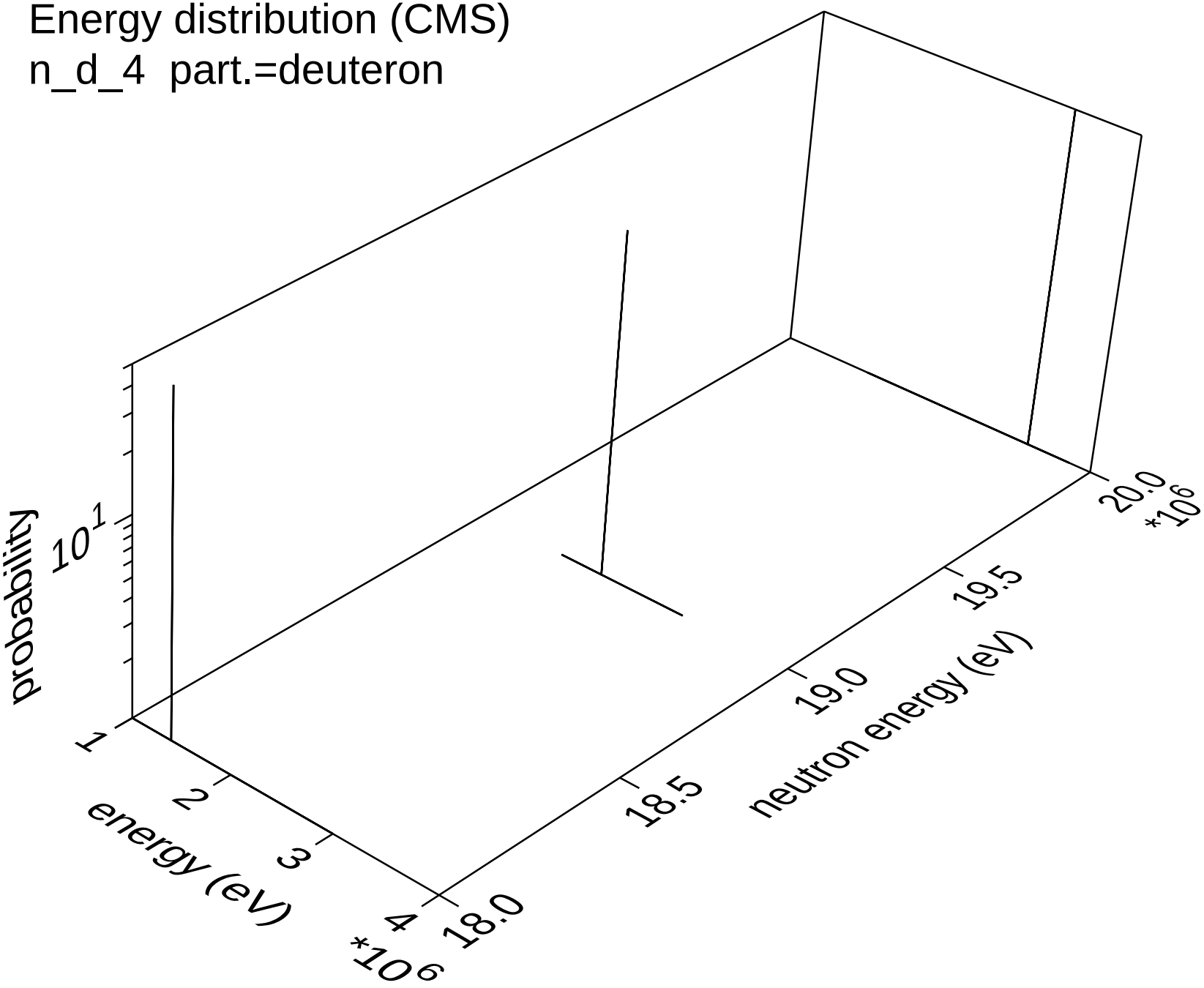

Energy distribution (CMS)
n_d_2 part.=deuteron
probability
10^{1}
0
energy (eV)
2
4
6
*10 6
16
18
neutron energy (eV)
20
*10 6

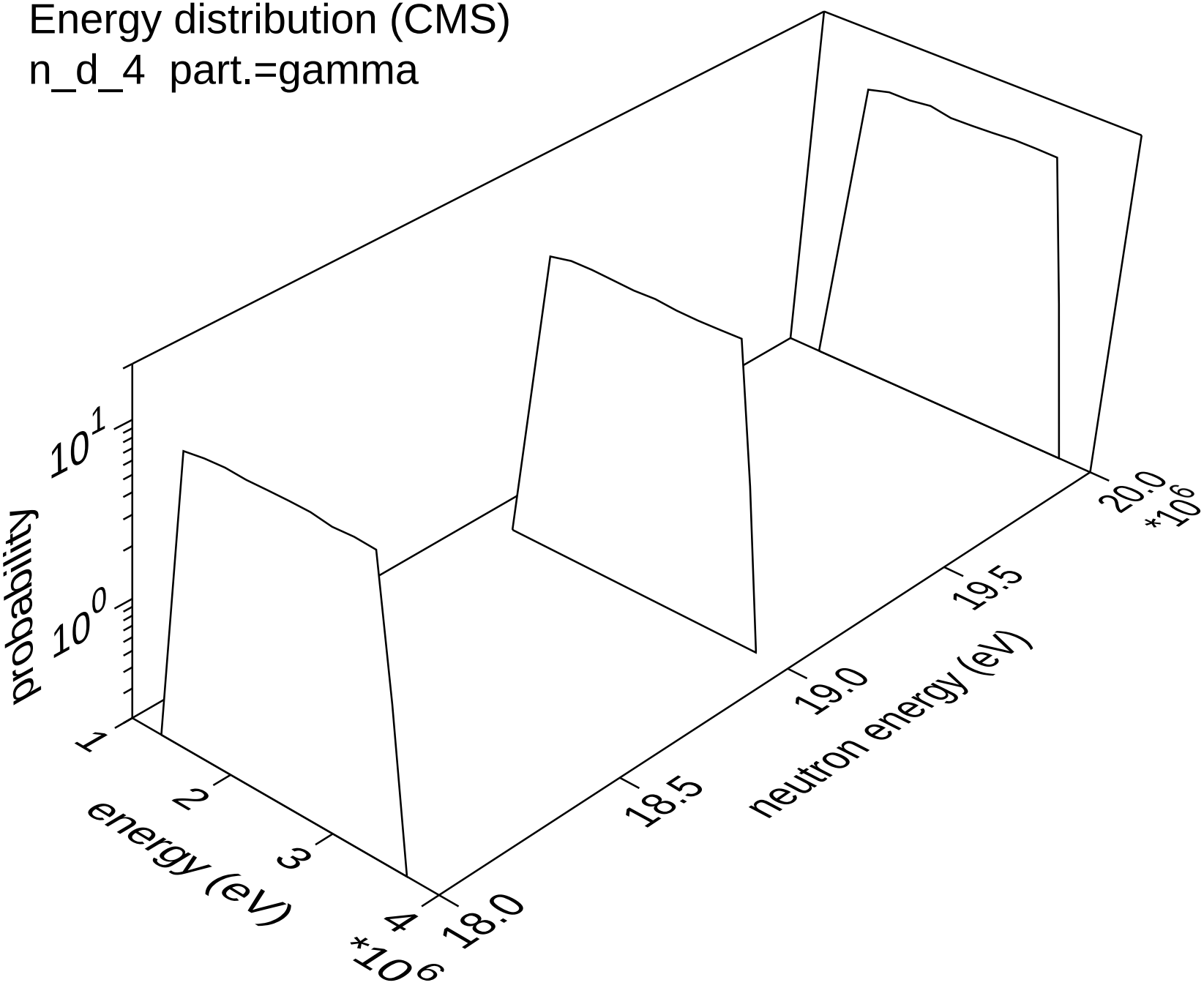


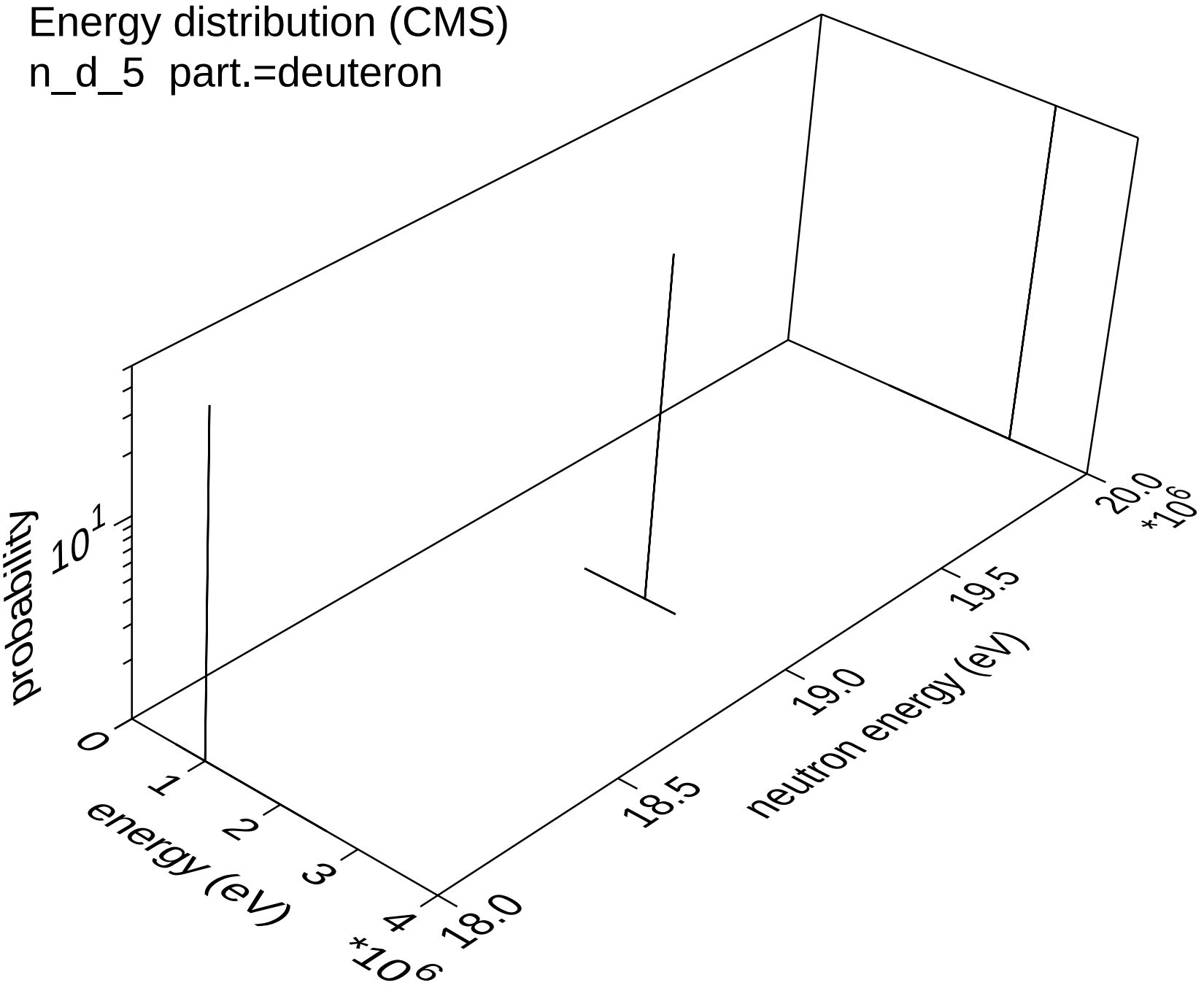
Energy distribution (CMS)
n_d_2 part.=gamma
probability
10^2
10^1
energy (eV)
*10^3
neutron energy (eV)
*10^6
16
18
20

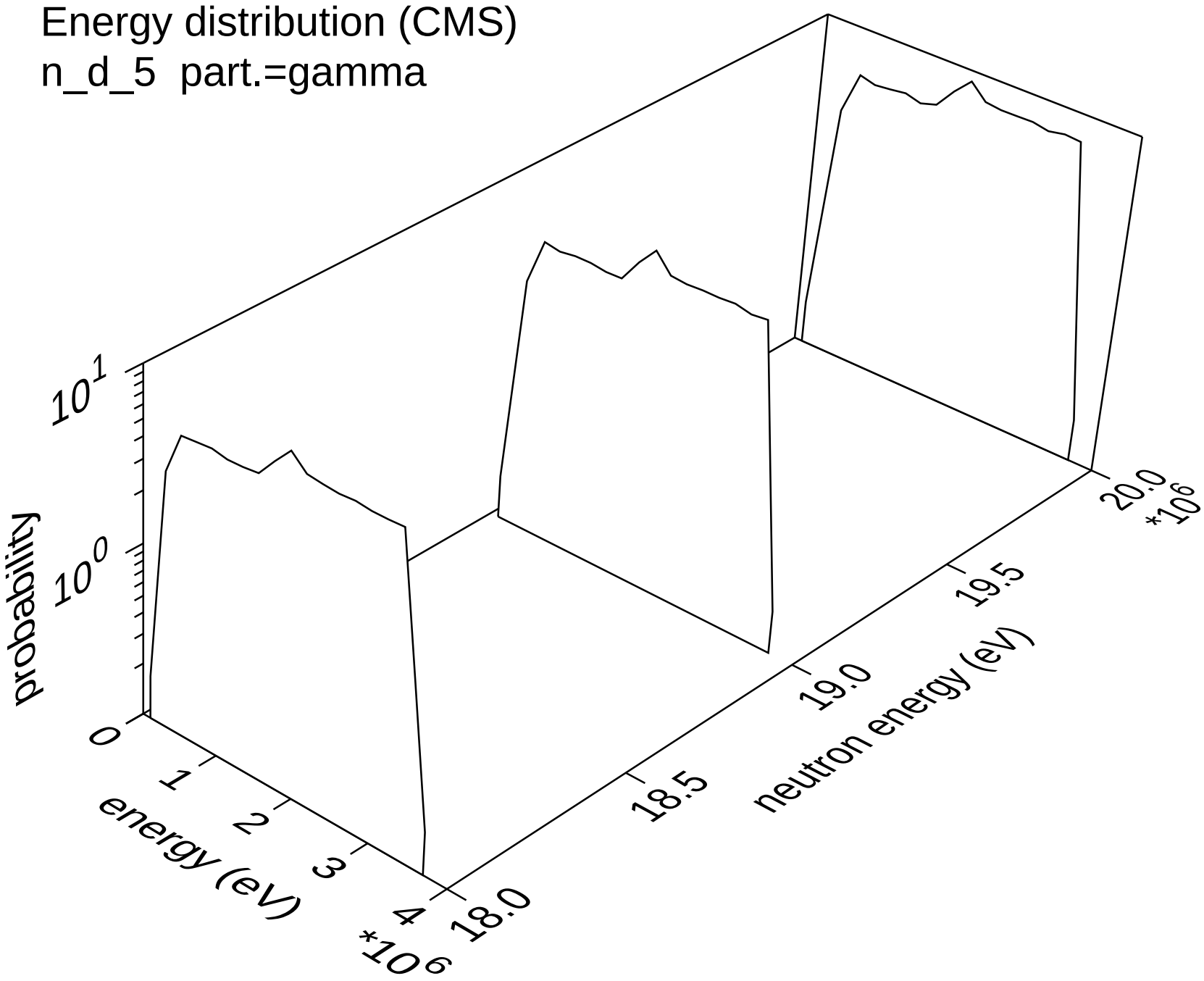

Energy distribution (CMS)
n_d_3 part.=deuteron
probability
10^{1}
1
2
3
4
*10 6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

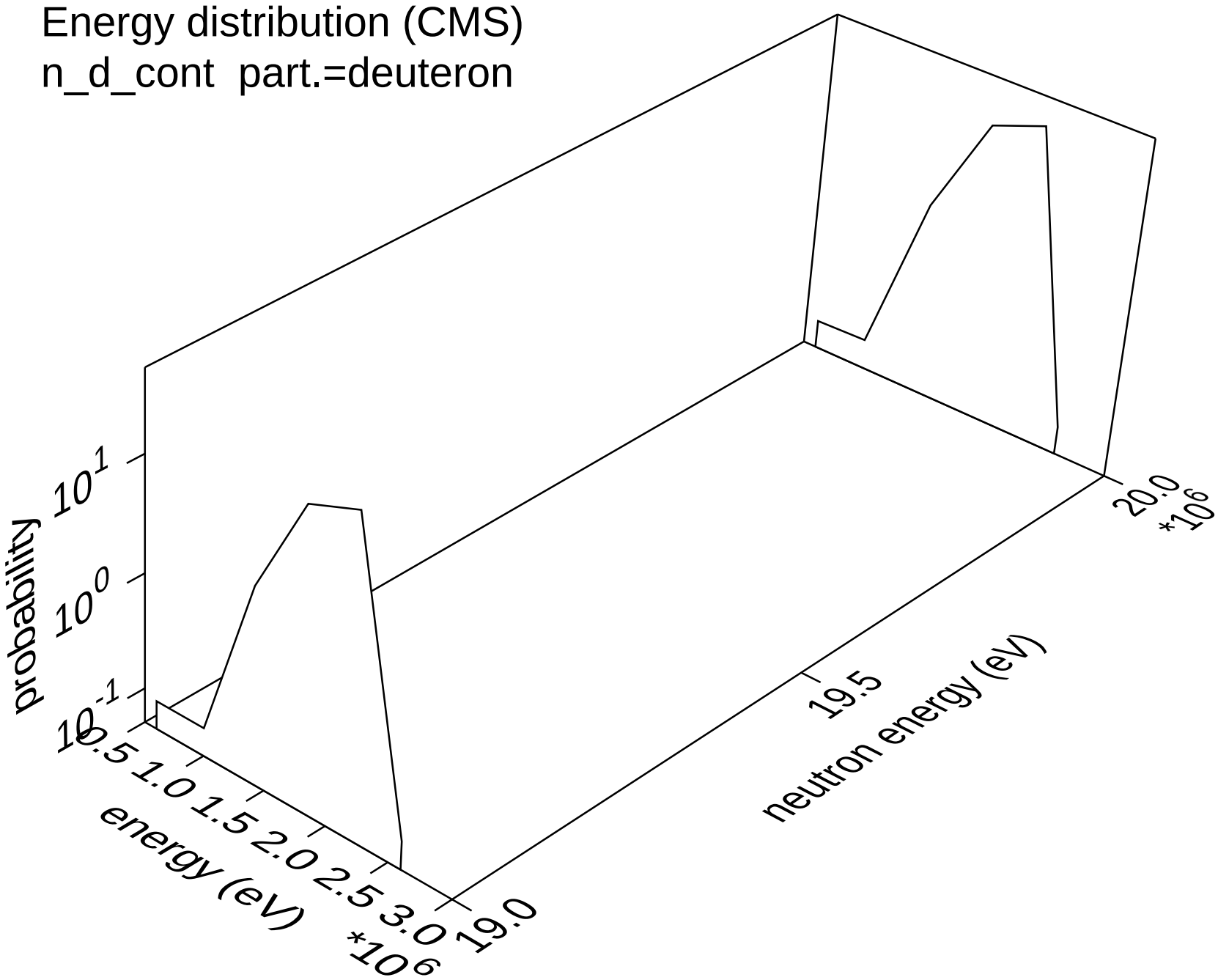

Energy distribution (CMS)
n_d_3 part.=gamma
probability
10^1
10^0
0
1
2
3
4
*10 6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

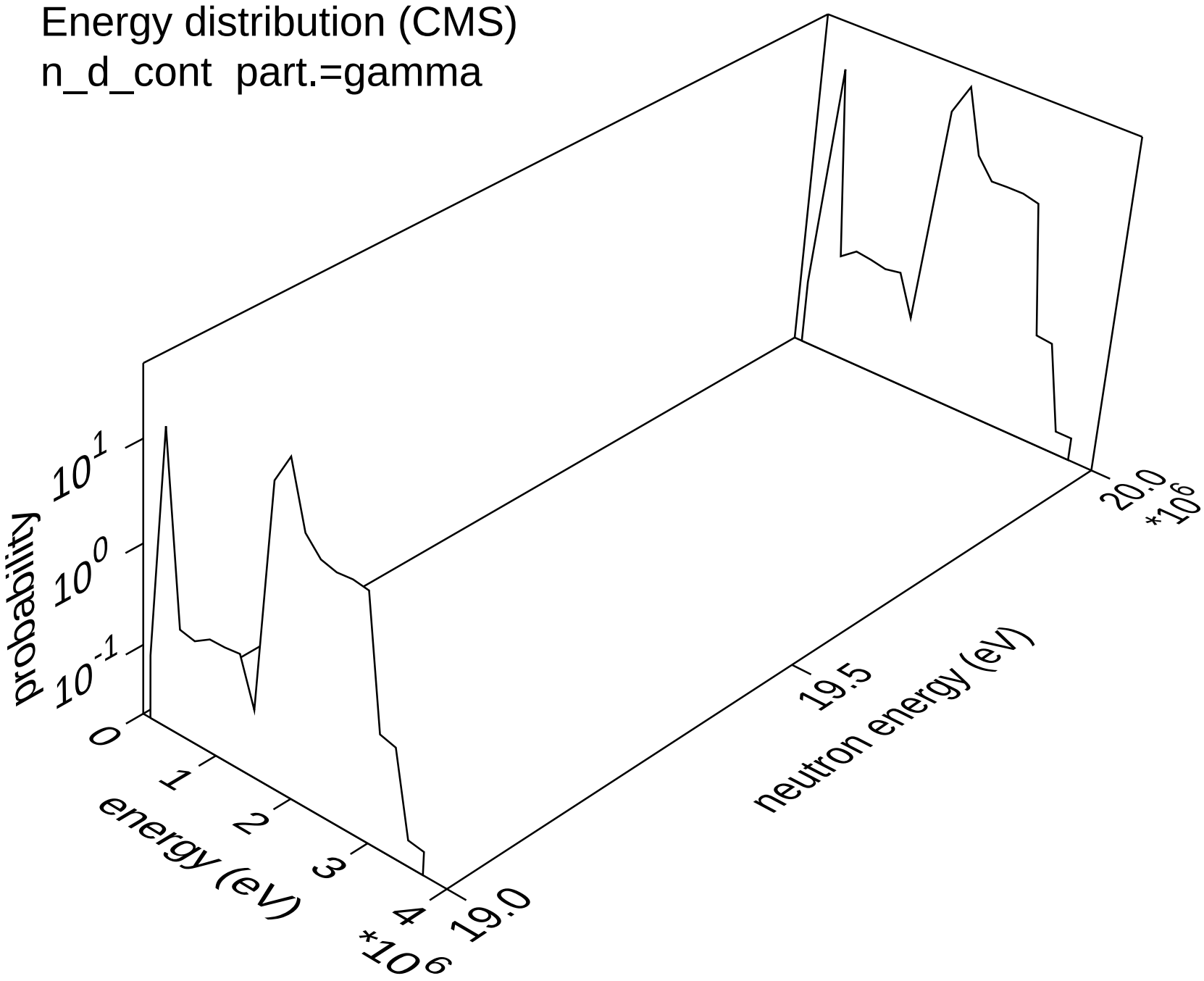

Energy distribution (CMS)
n_d_4 part.=deuteron
probability
10^{-1}
1
2
3
4
energy (eV)
*10^6
18.0
18.5
19.0
19.5
20.0
neutron energy (eV)
*10^6

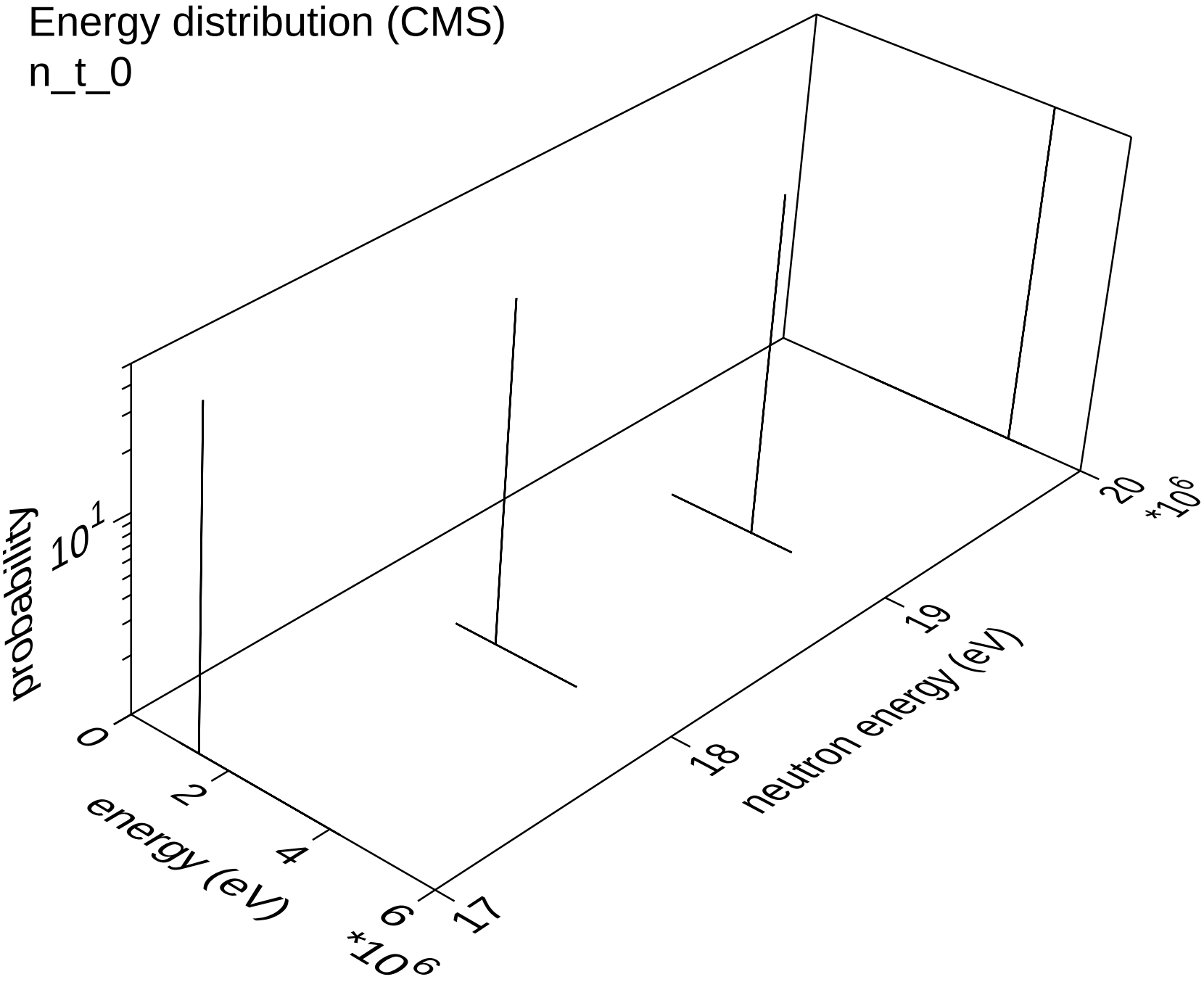

Energy distribution (CMS)
n_d_4 part.=gamma
probability
10^1
10^0
1
2
3
4
energy (eV)
*10 6
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

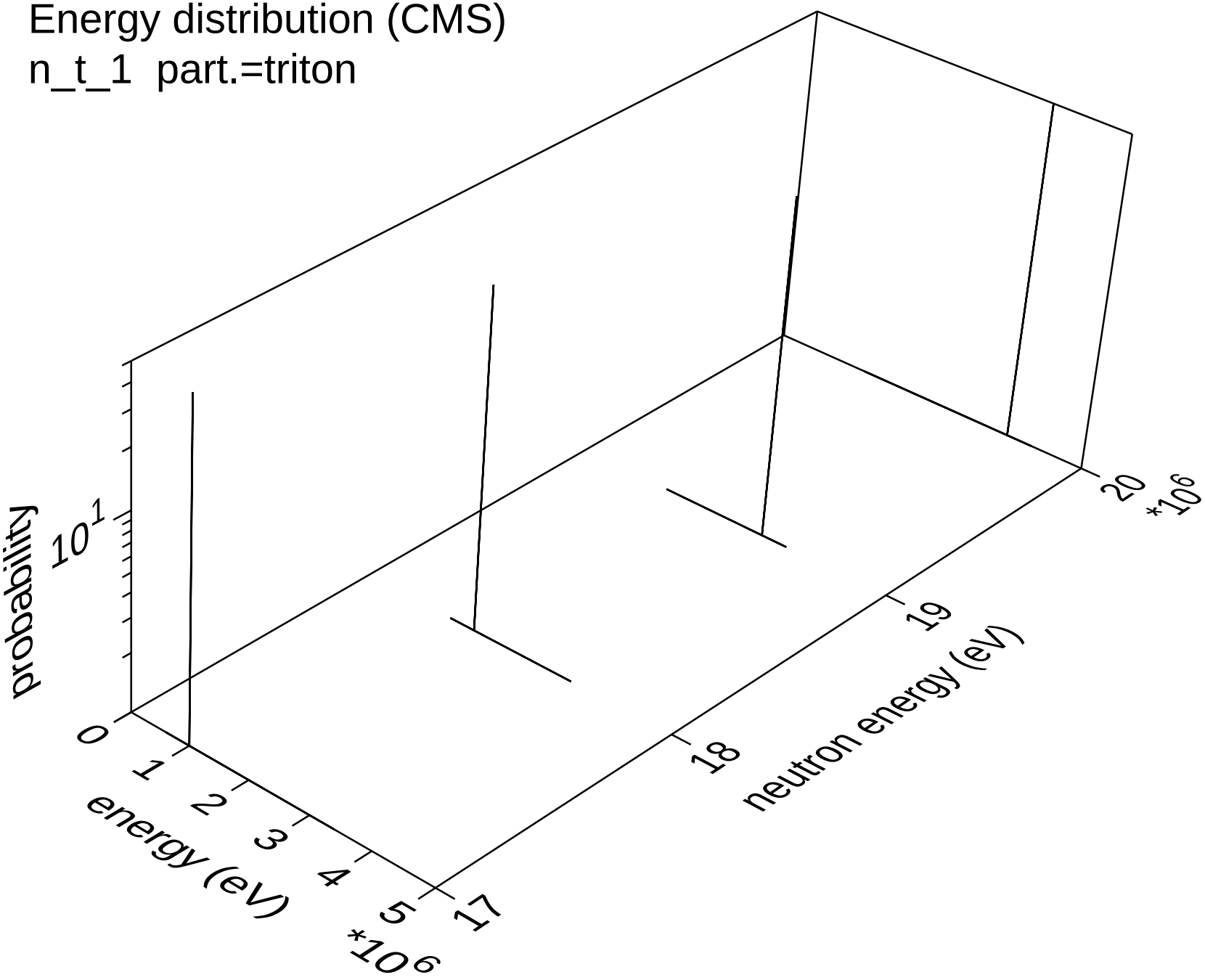

Energy distribution (CMS)
n_d_5 part.=deuteron
probability
10^{1}
0
energy (eV)
1
2
3
4
*10 6
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

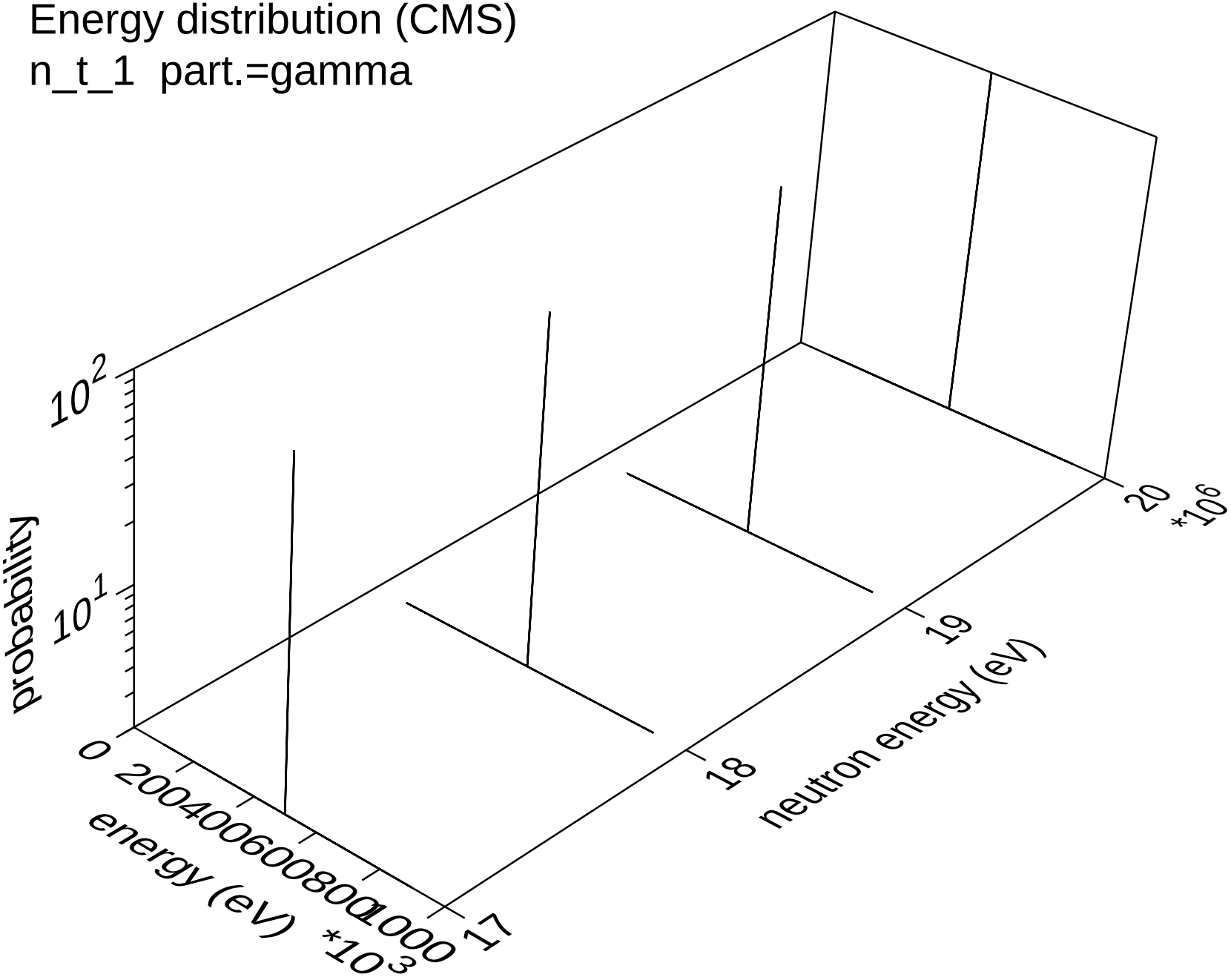

Energy distribution (CMS)
n_d_5 part.=gamma
probability
10^1
10^0
0
1
2
3
4
*10 6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

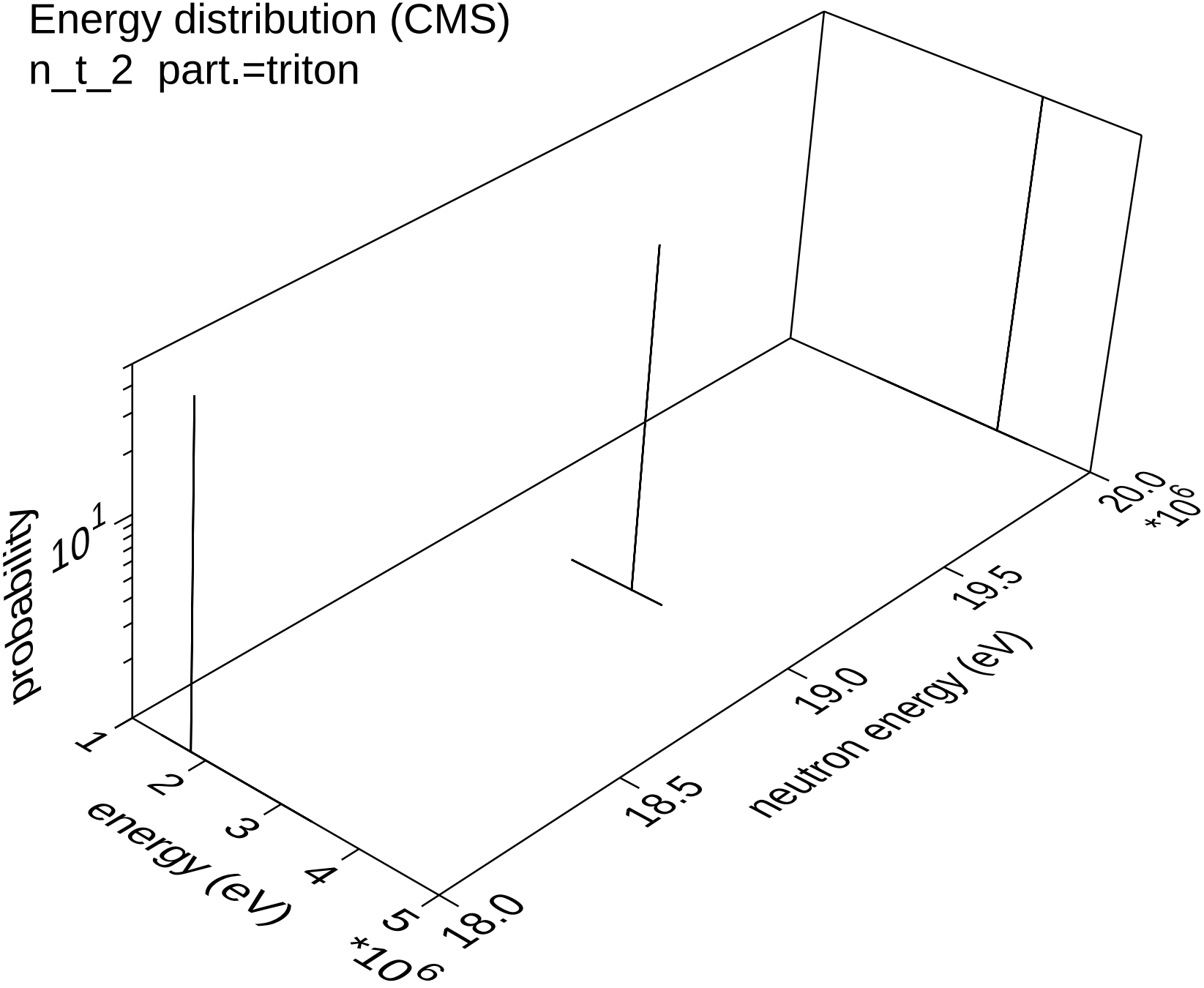

Energy distribution (CMS)
n_d_cont part.=deuteron
probability
10^{1}
10^{0}
10^{-1}
0.5
1.0
1.5
2.0
2.5
3.0
energy (eV)
*10^6
19.0
19.5
20.0
*10^6
neutron energy (eV)

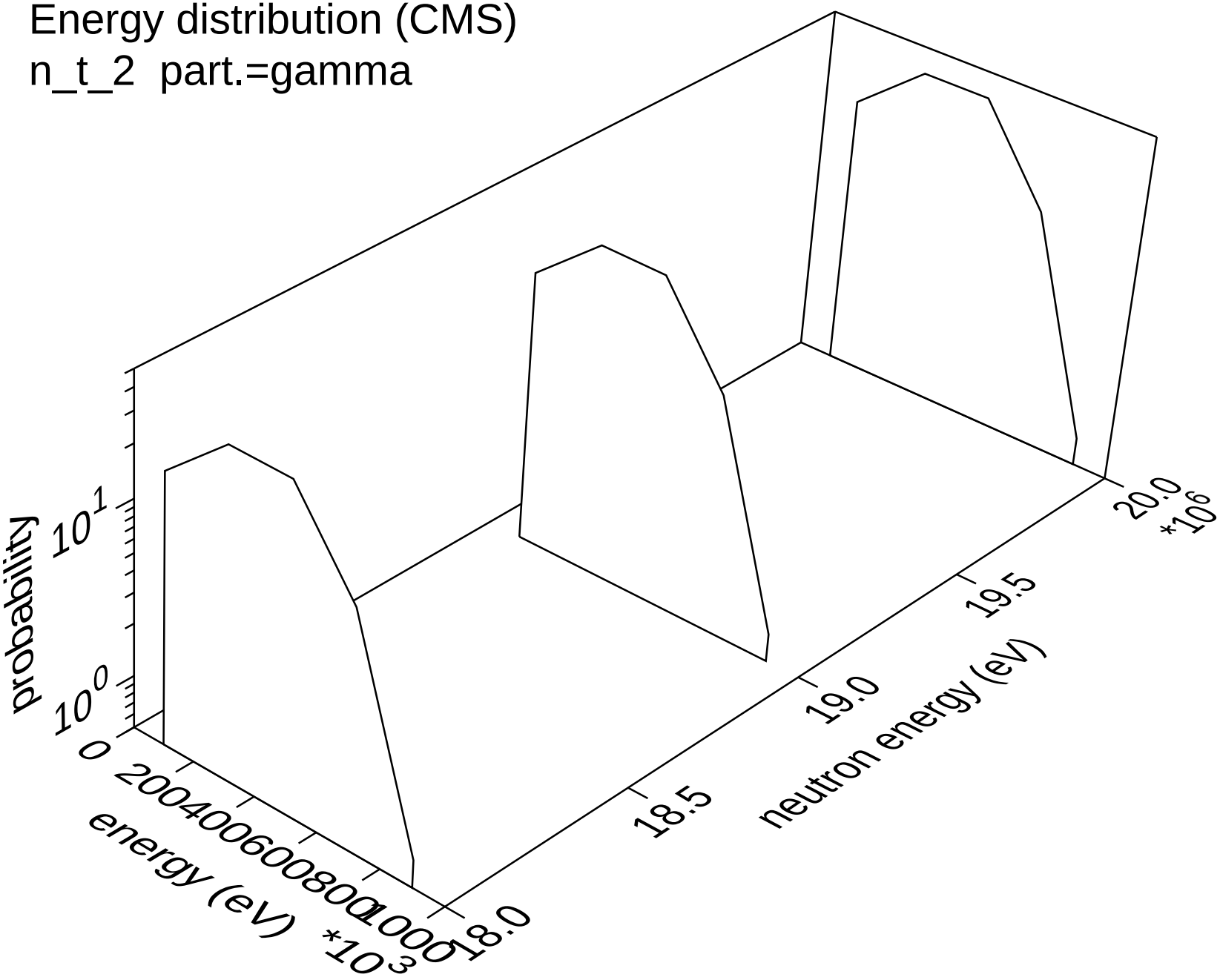

Energy distribution (CMS)
n_d_cont part.=gamma
probability
10^{1}
10^{0}
10^{-1}
0
1
2
3
4
*10 6
energy (eV)
19.0
19.5
20.0
*10^6
neutron energy (eV)

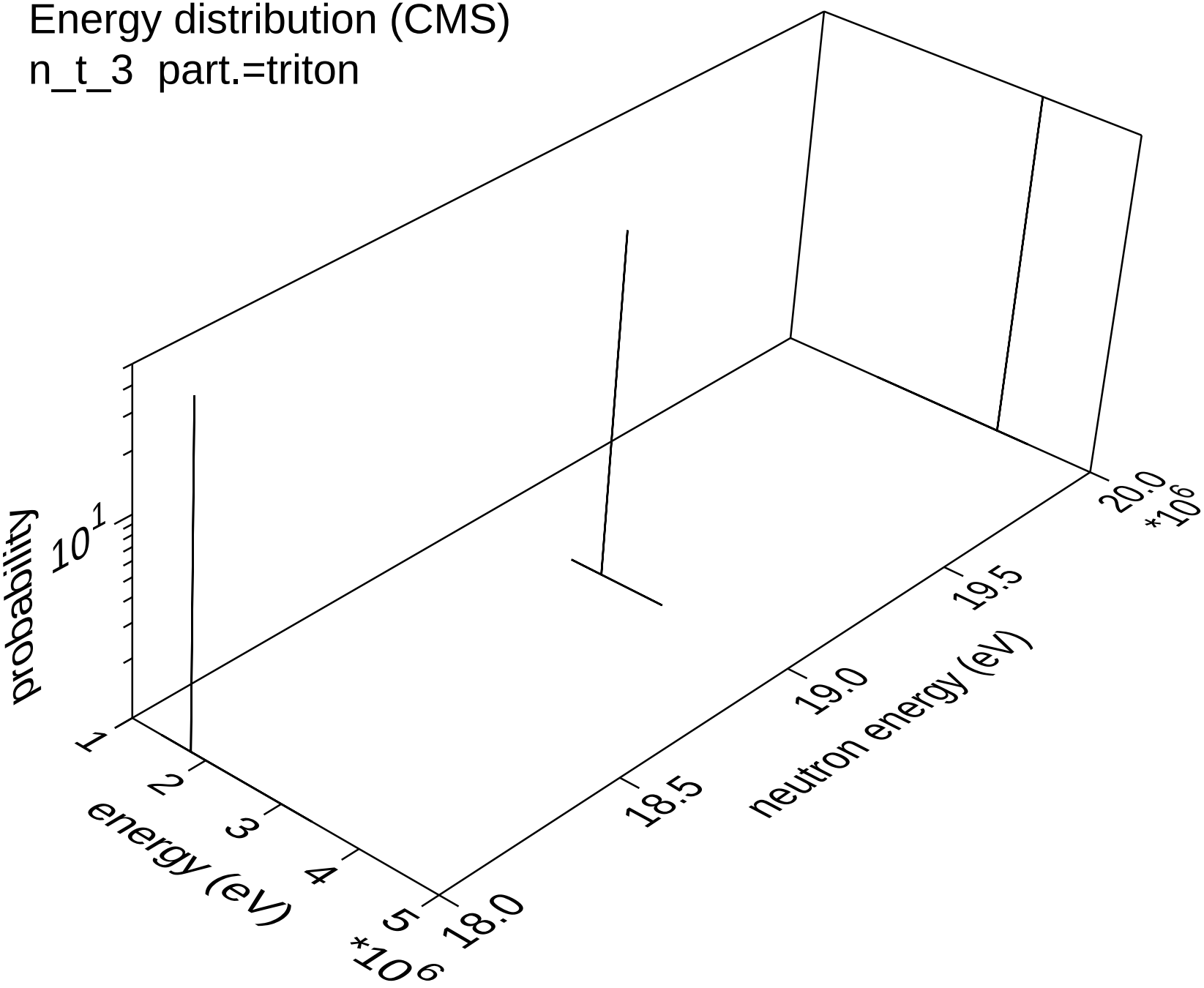

Energy distribution (CMS)
n_t_0
probability
10^{1}
0
energy (eV)
2
4
6
*10^6
17
18
19
20
*10^6
neutron energy (eV)

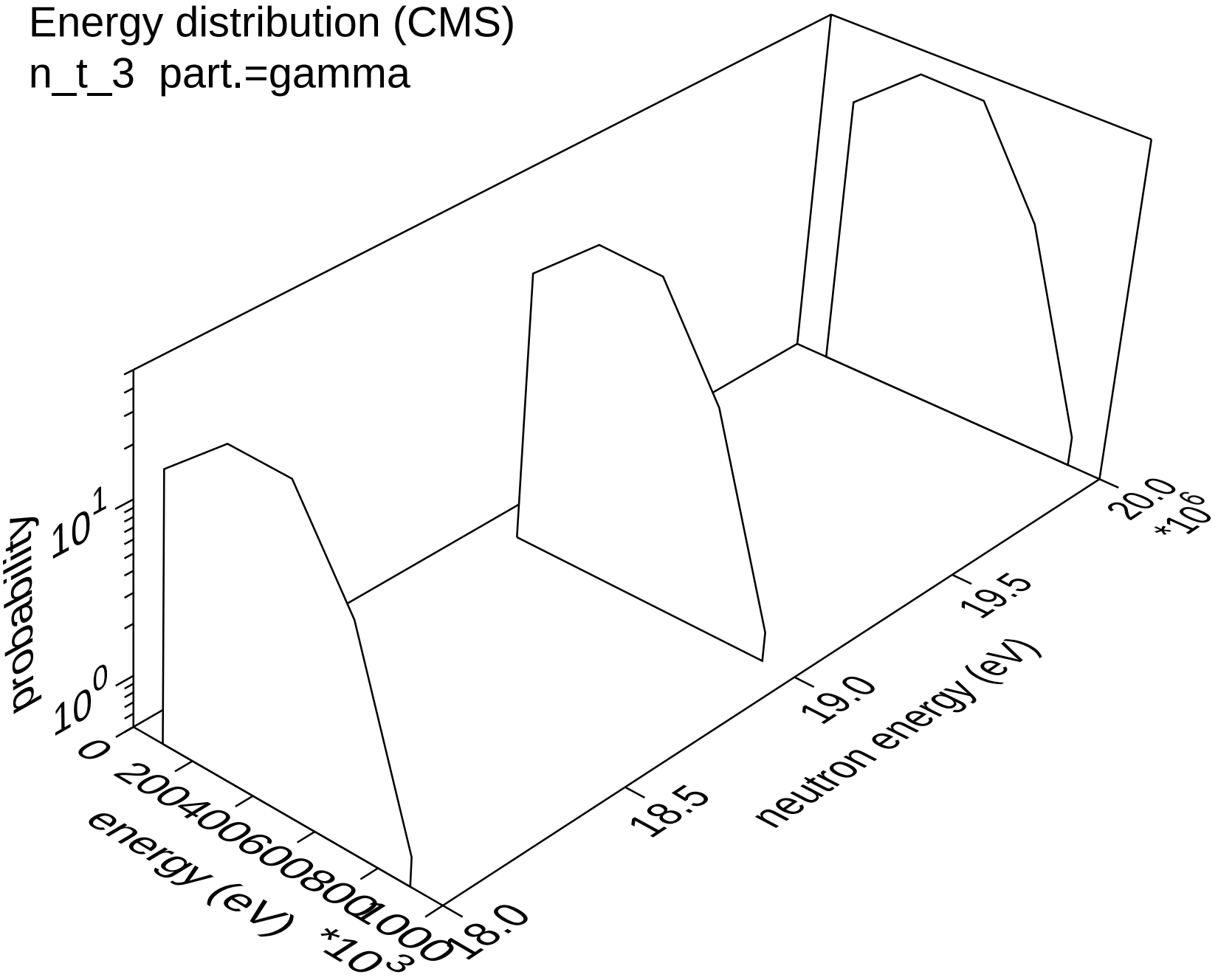

Energy distribution (CMS)
n_t_1 part.=triton
probability
10^{1}
0
energy (eV)
1
2
3
4
5
*10 6
17
18
neutron energy (eV)
19
20
*10^6

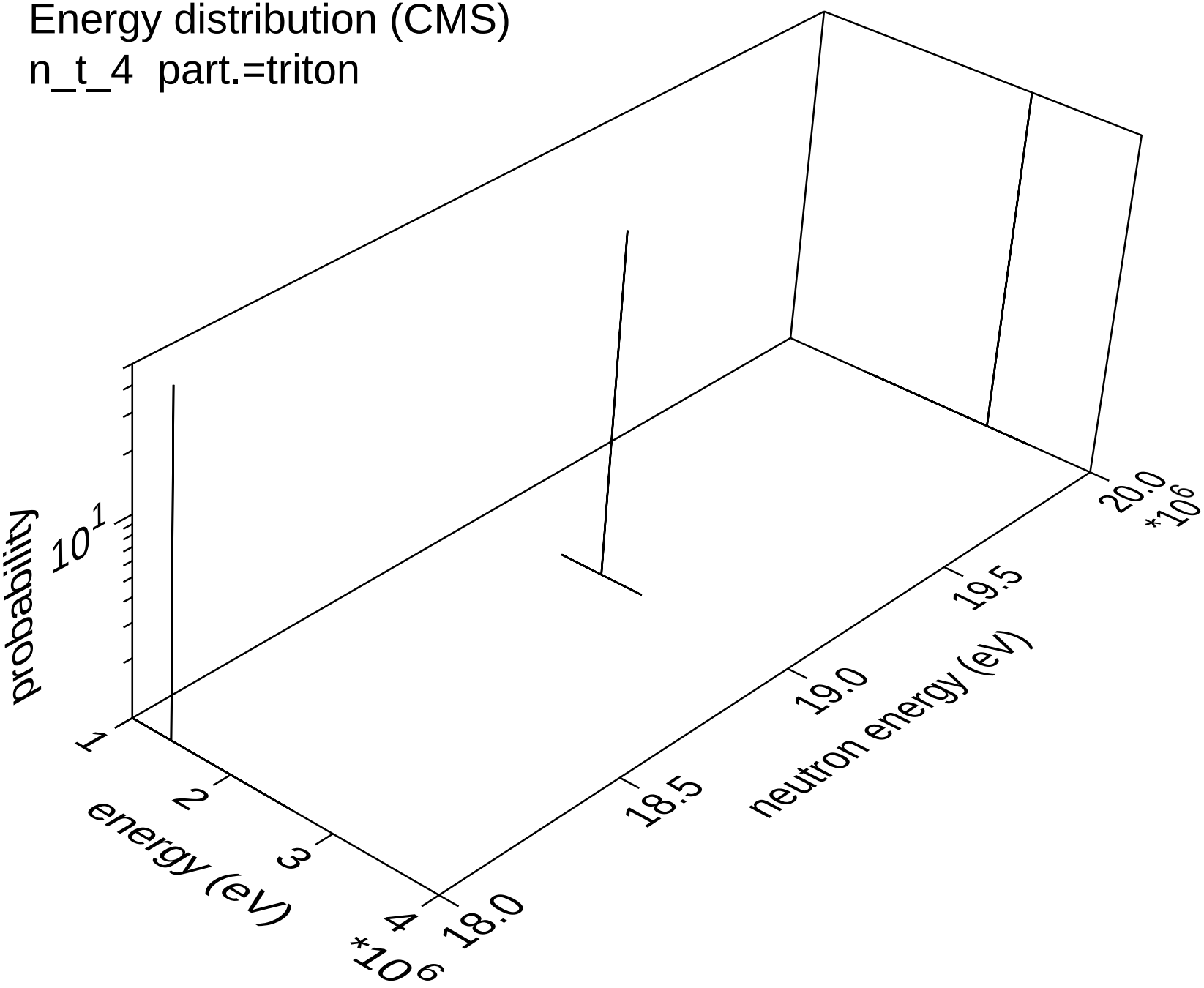

Energy distribution (CMS)
n_t_1 part.=gamma
probability
10^2
10^1
0
200
400
600
800
1000
energy (eV) *10^3
17
18
19
20
*10^6
neutron energy (eV)

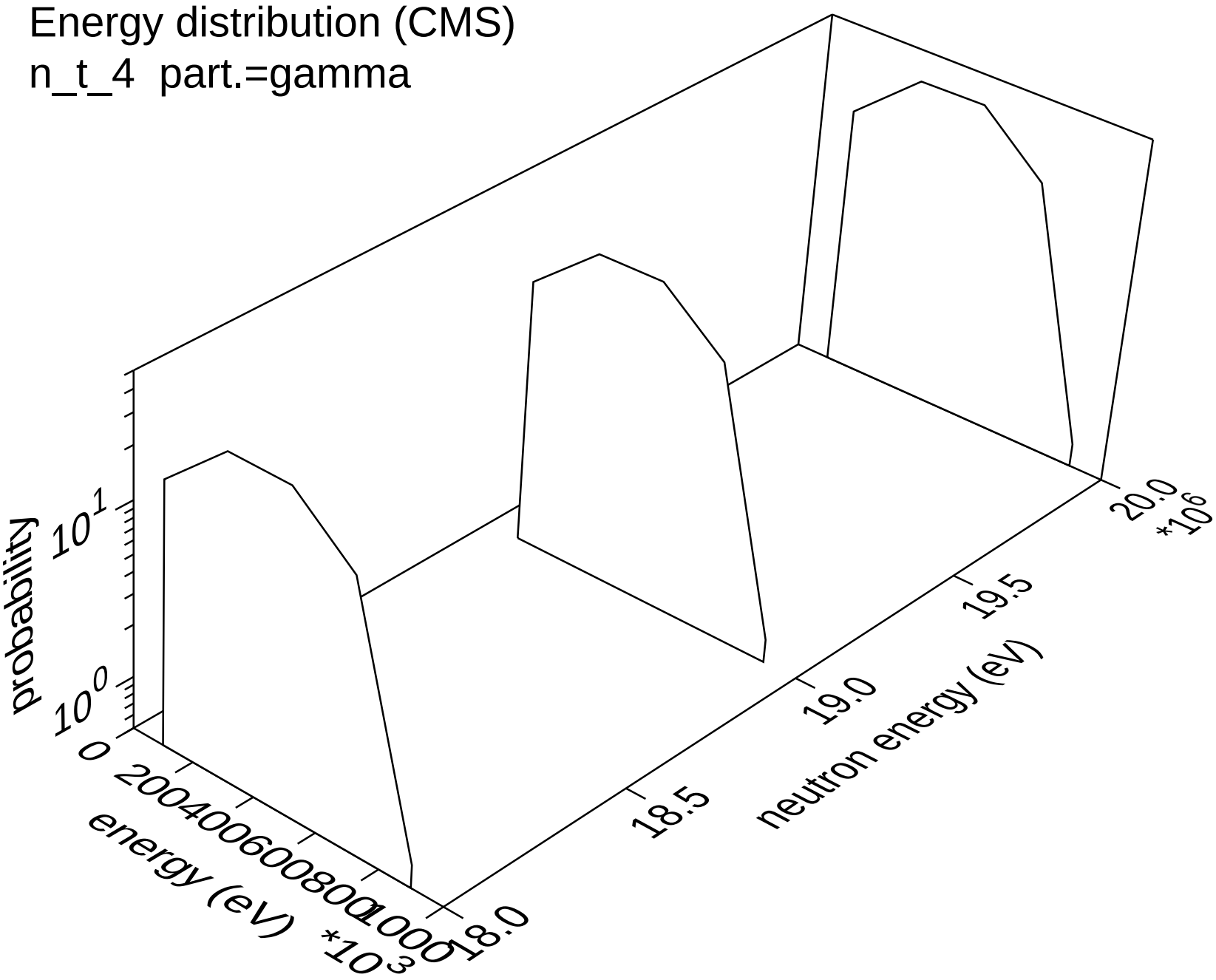

Energy distribution (CMS)
n_t_2 part.=triton
probability
10^{-1}
1
2
3
4
5
*10 6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10 6
neutron energy (eV)

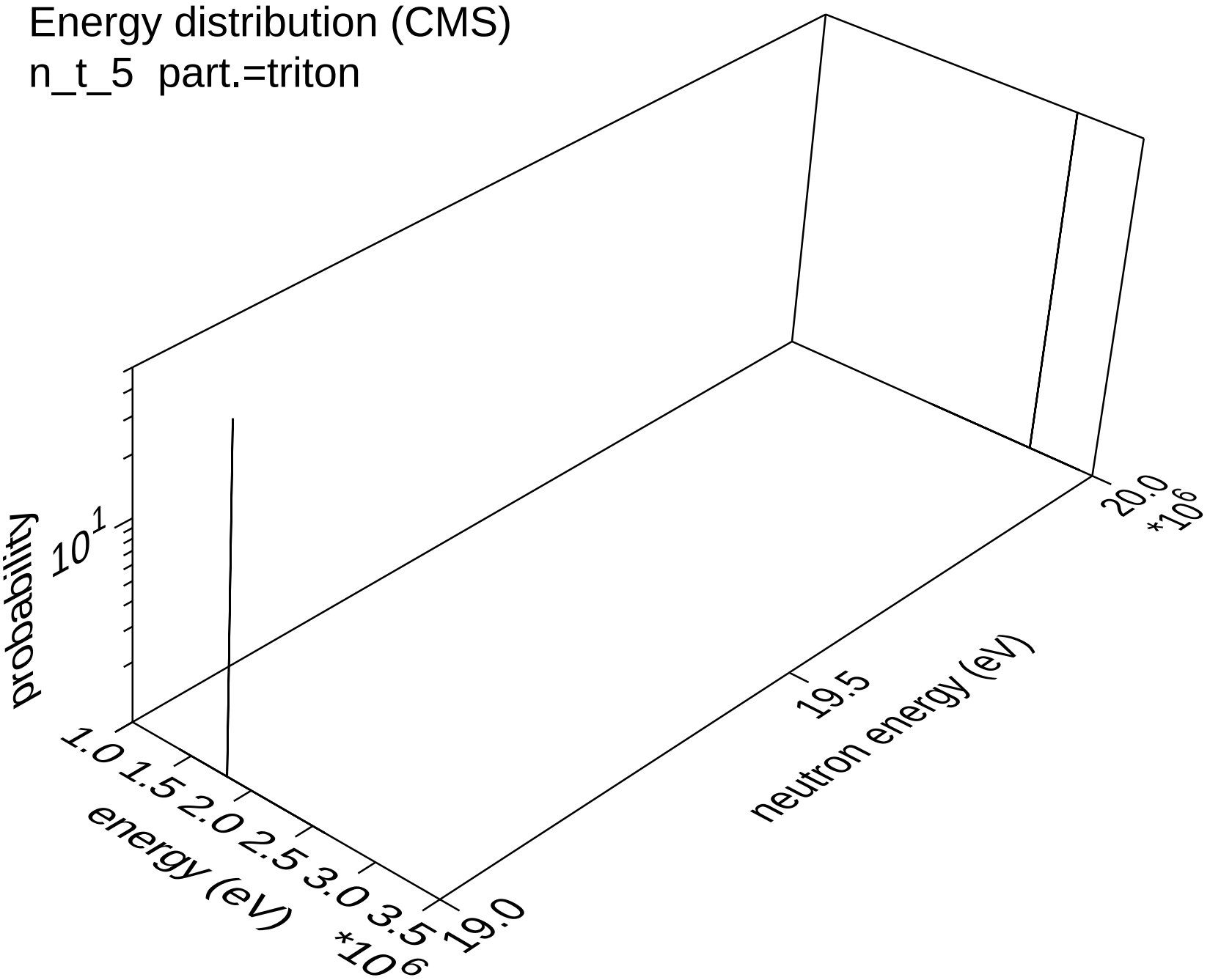

Energy distribution (CMS)
n_t_2 part.=gamma
probability
10^1
10^0
0
2004006008001000
energy (eV) *10^3
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

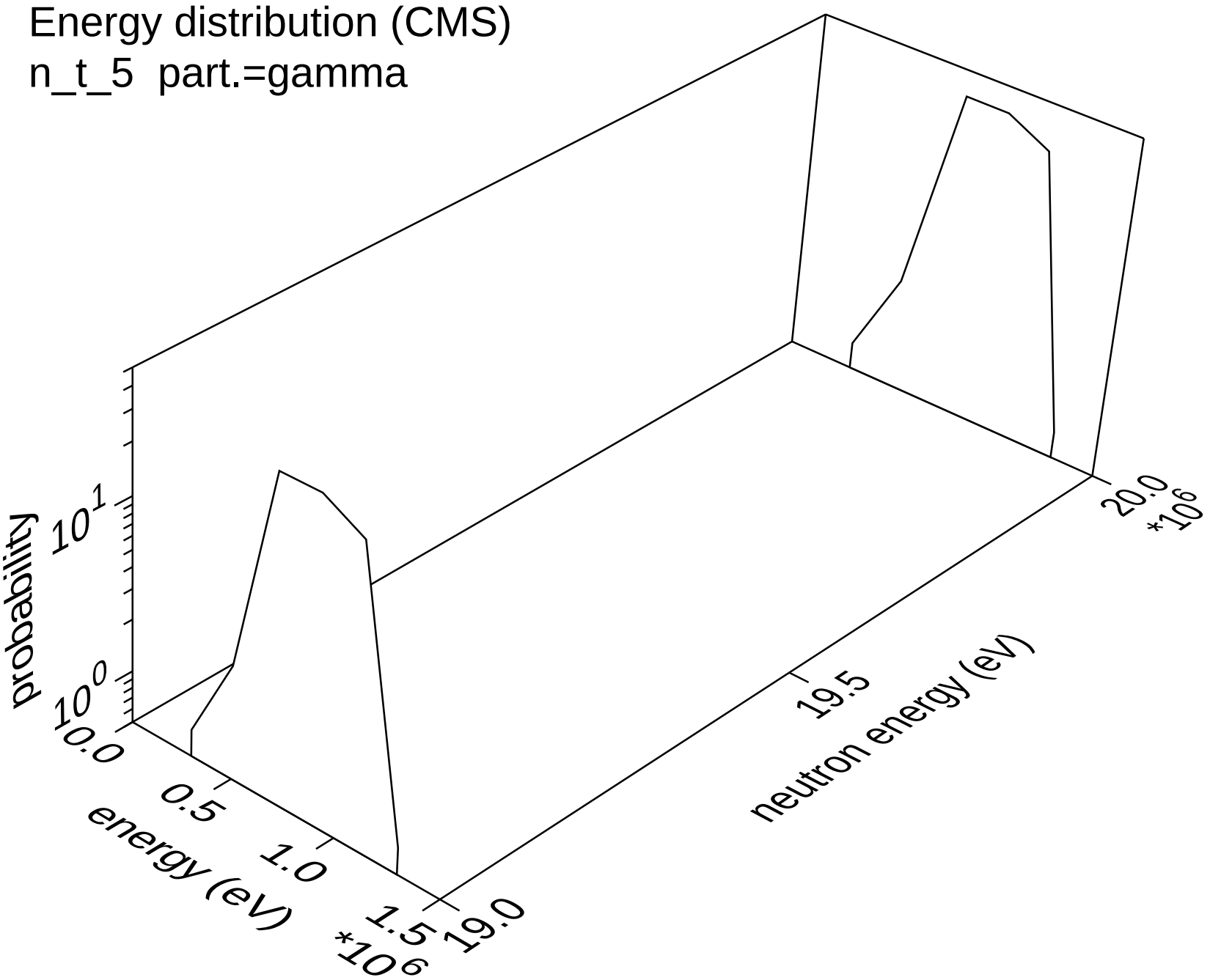

Energy distribution (CMS)
n_t_3 part.=triton
probability
10^{-1}
1
2
3
4
5
*10 6
energy (eV)
18.0
18.5
19.0
19.5
20.0
*10 6
neutron energy (eV)

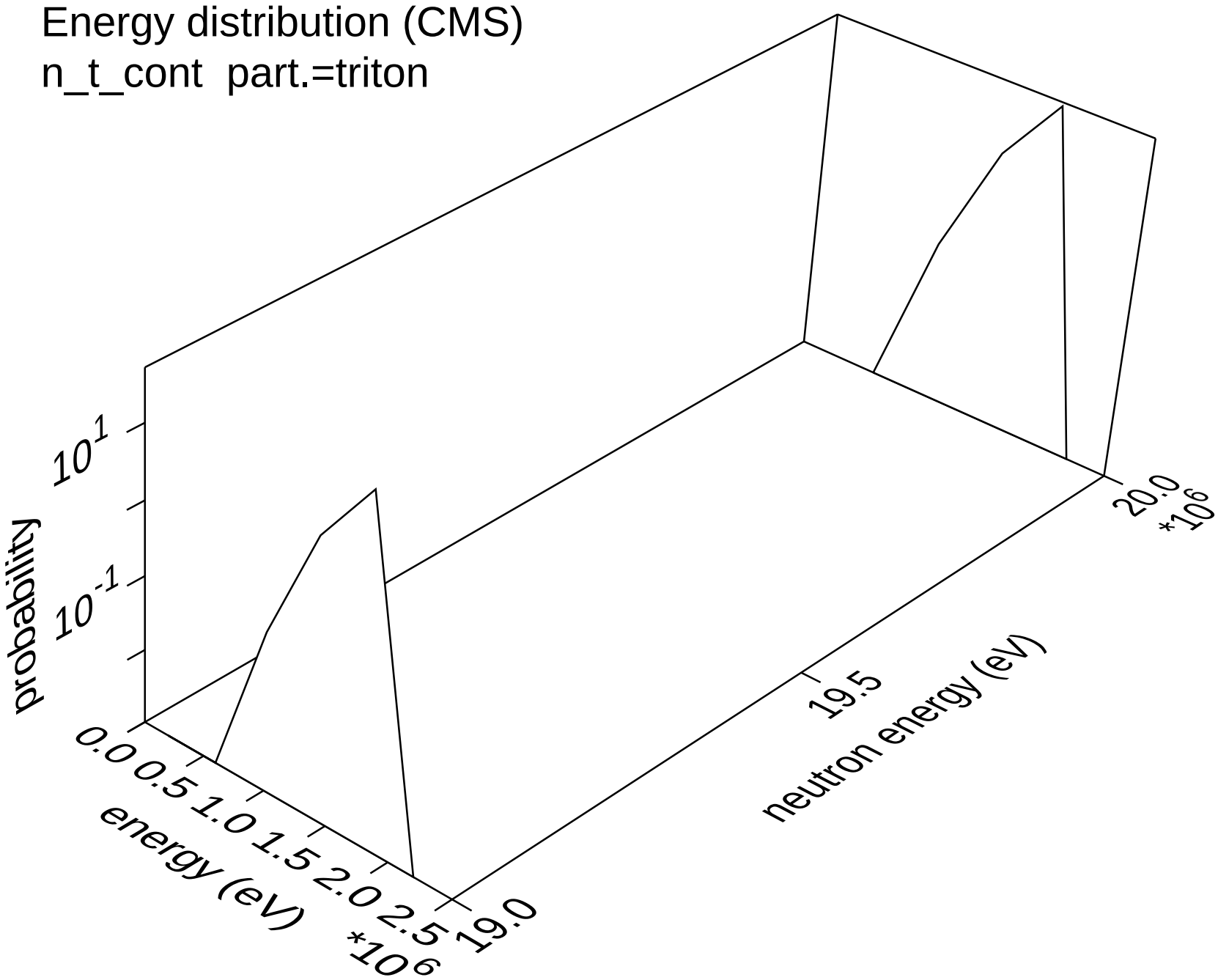

Energy distribution (CMS)
n_t_3 part.=gamma
probability
10^1
10^0
0
200
400
600
800
1000
energy (eV) *10^3
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

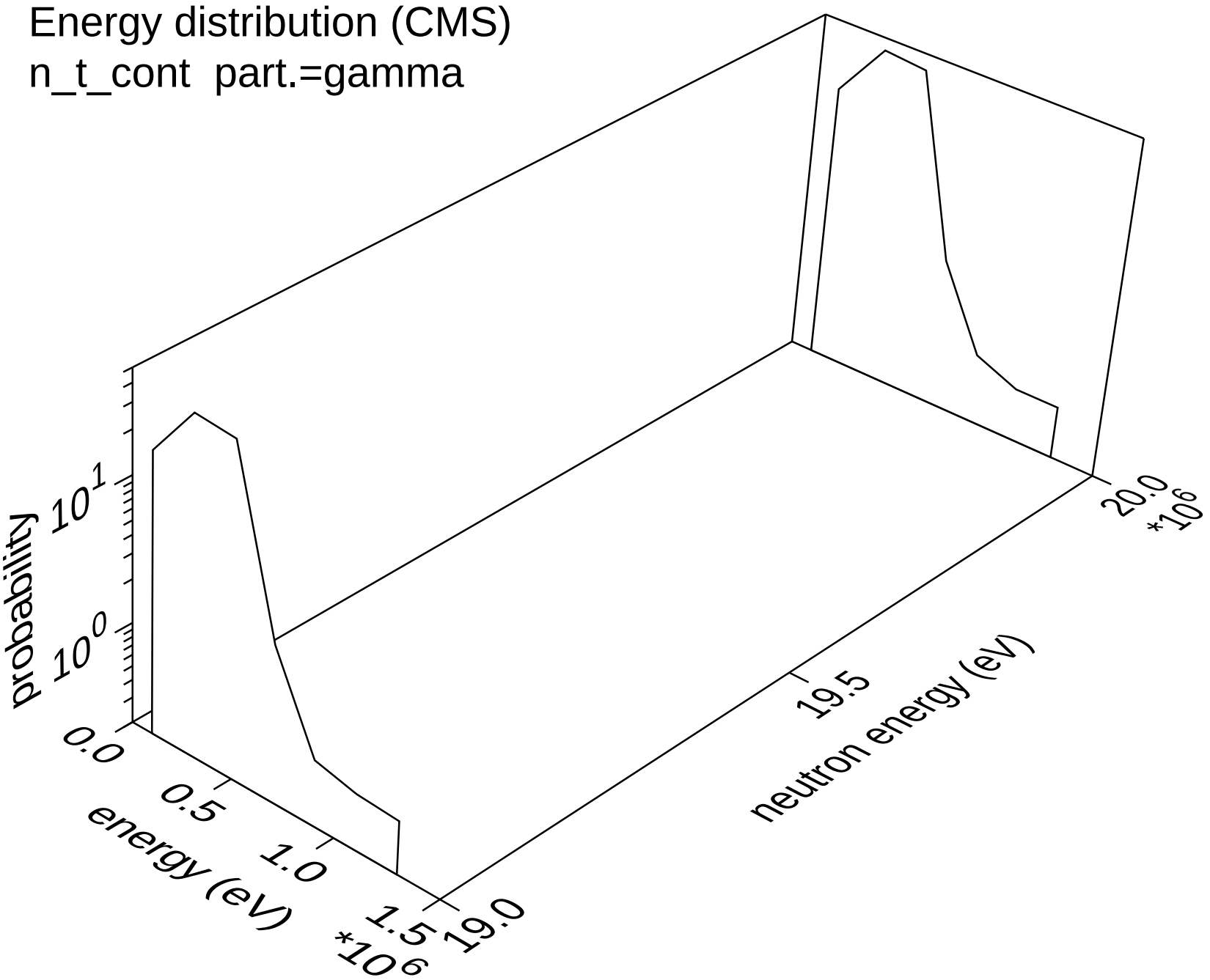

Energy distribution (CMS)
n_t_4 part.=triton
probability
10^{1}
1
2
3
4
energy (eV)
*10 6
18.0
18.5
19.0
19.5
20.0
*10 6
neutron energy (eV)

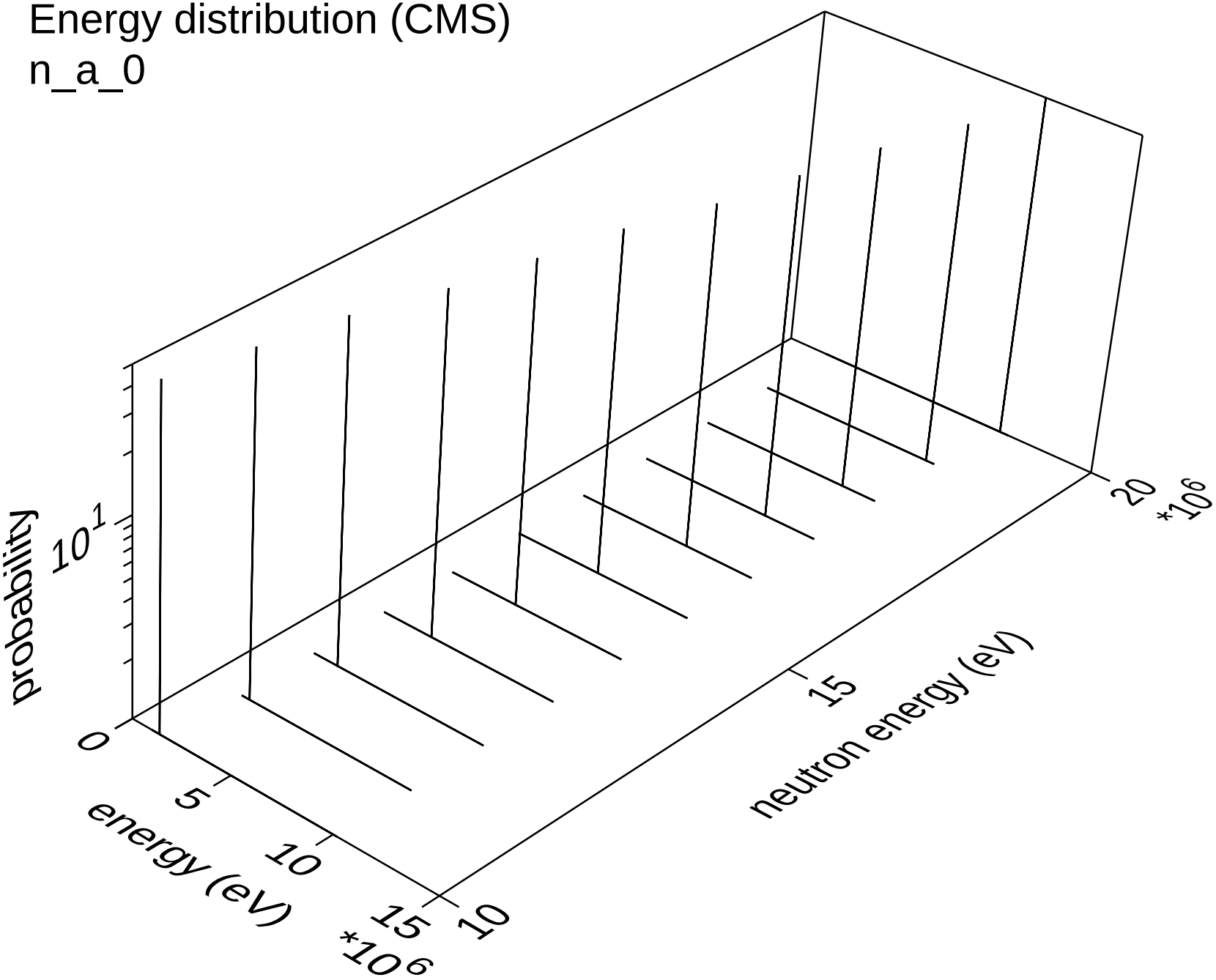

Energy distribution (CMS)
n_t_4 part.=gamma
probability
10^1
10^0
0
200
400
600
800
1000
energy (eV) *10^3
18.0
18.5
19.0
19.5
20.0
*10^6
neutron energy (eV)

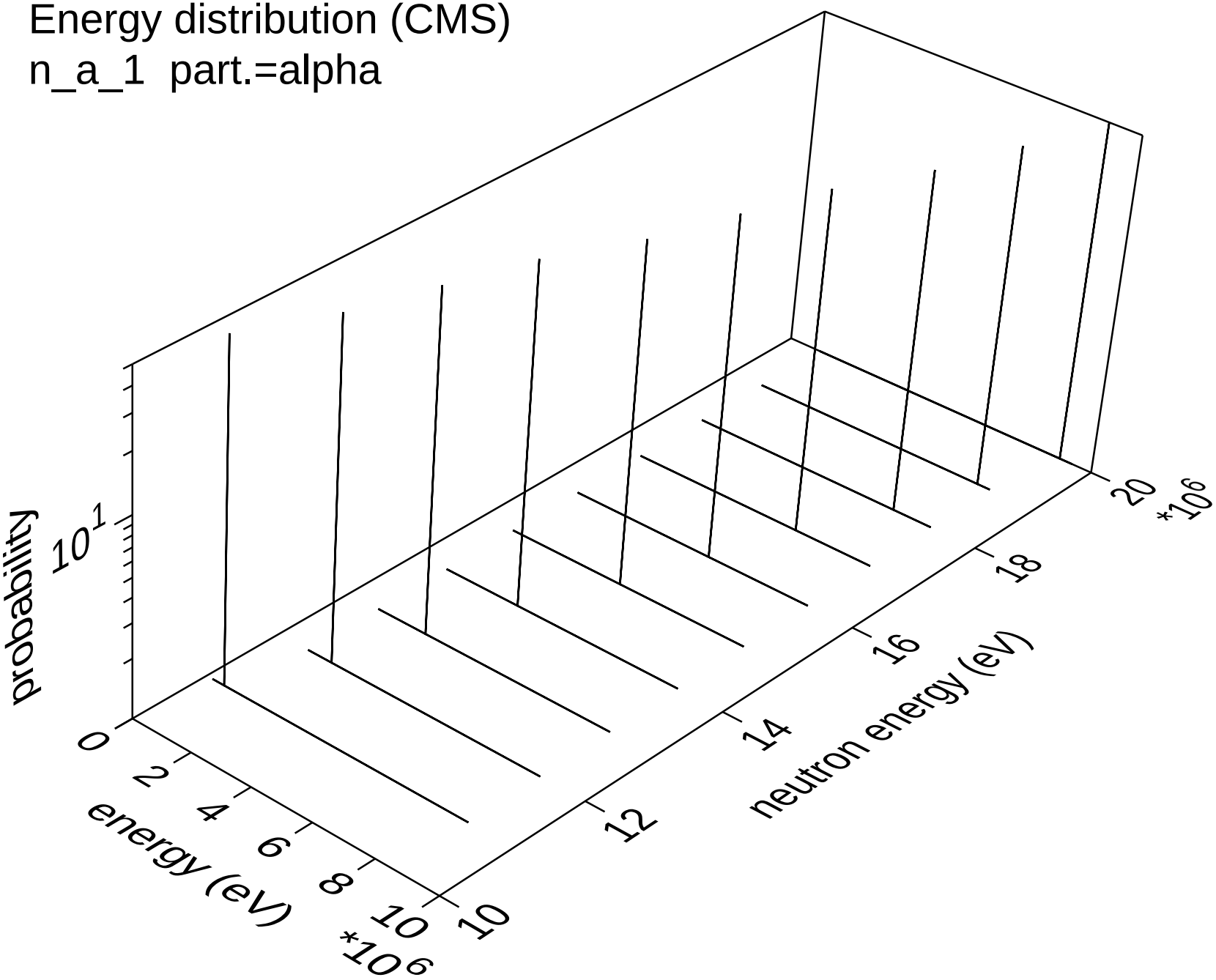

Energy distribution (CMS)
n_t_5 part.=triton
probability
10^{1}
1.0 1.5 2.0 2.5 3.0 3.5
energy (eV)
*10^6
19.0
19.5
20.0
*10^6
neutron energy (eV)

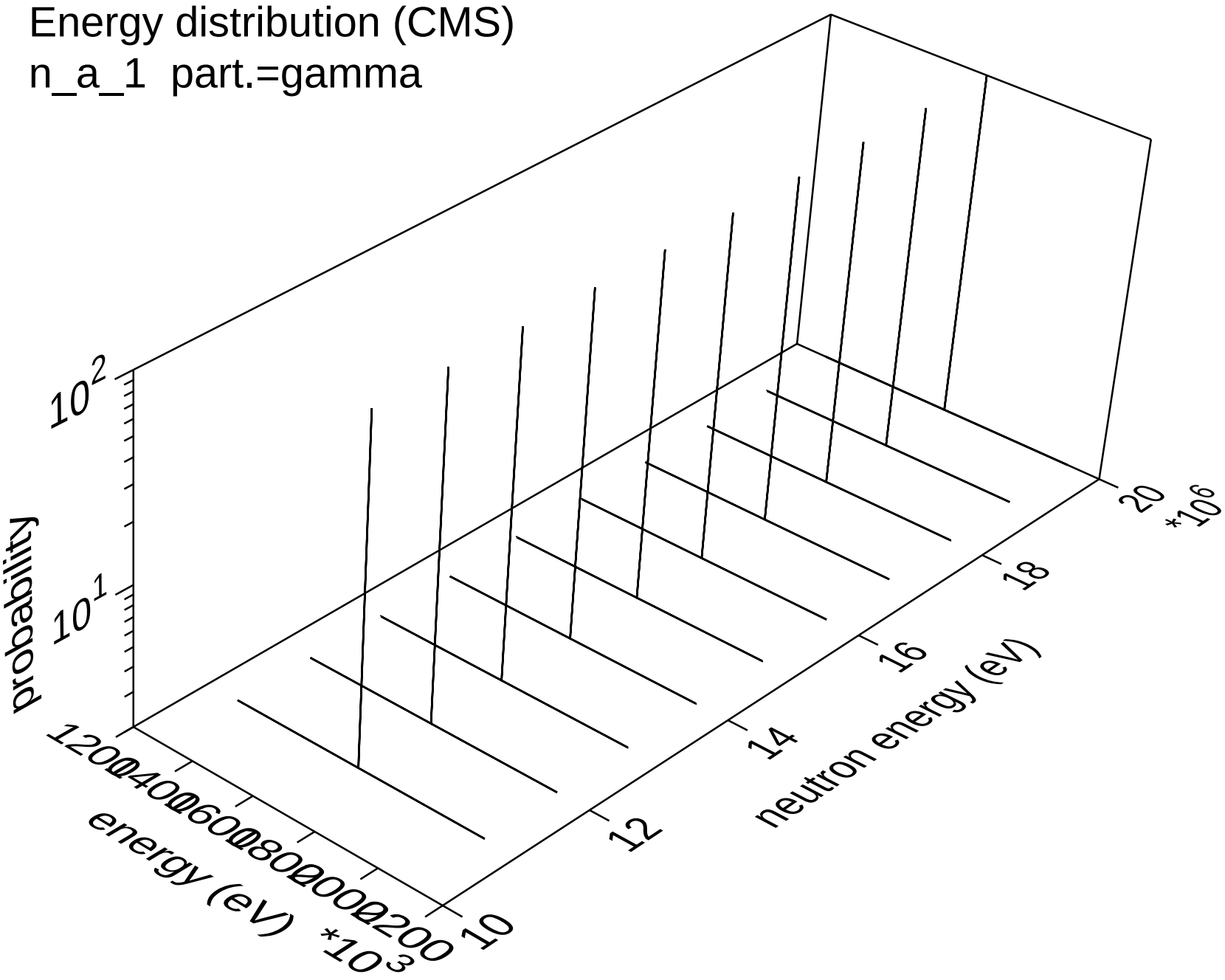

Energy distribution (CMS)
n_t_5 part.=gamma
probability
10^1
10^0
10.0
0.5
1.0
1.5
*10^6
energy (eV)
19.0
19.5
20.0
*10^6
neutron energy (eV)

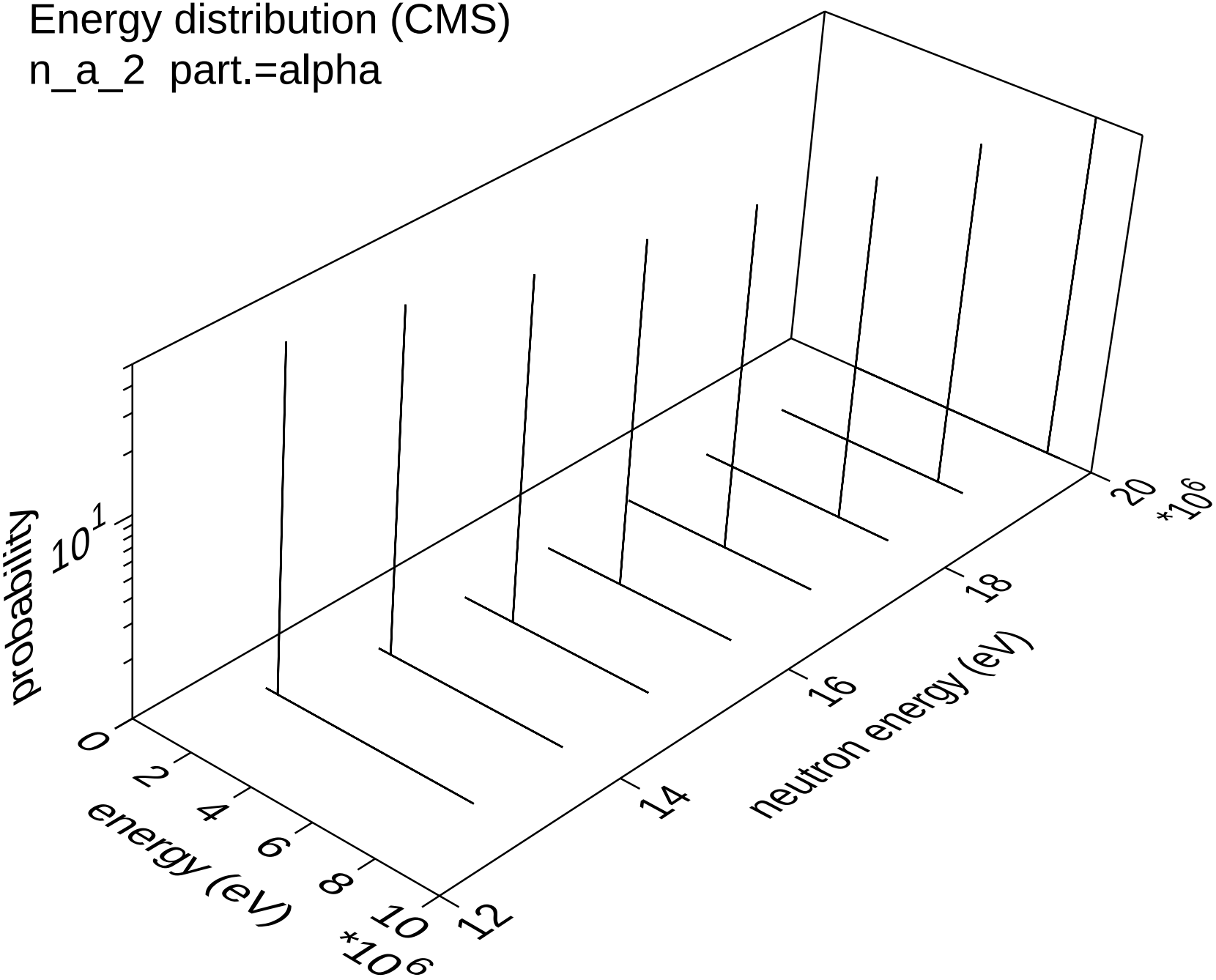

Energy distribution (CMS)
n_t_cont part.=triton
probability
10^{1}
10^{-1}
0.0
0.5
1.0
1.5
2.0
2.5
*10^6
energy (eV)
19.0
19.5
20.0
*10^6
neutron energy (eV)

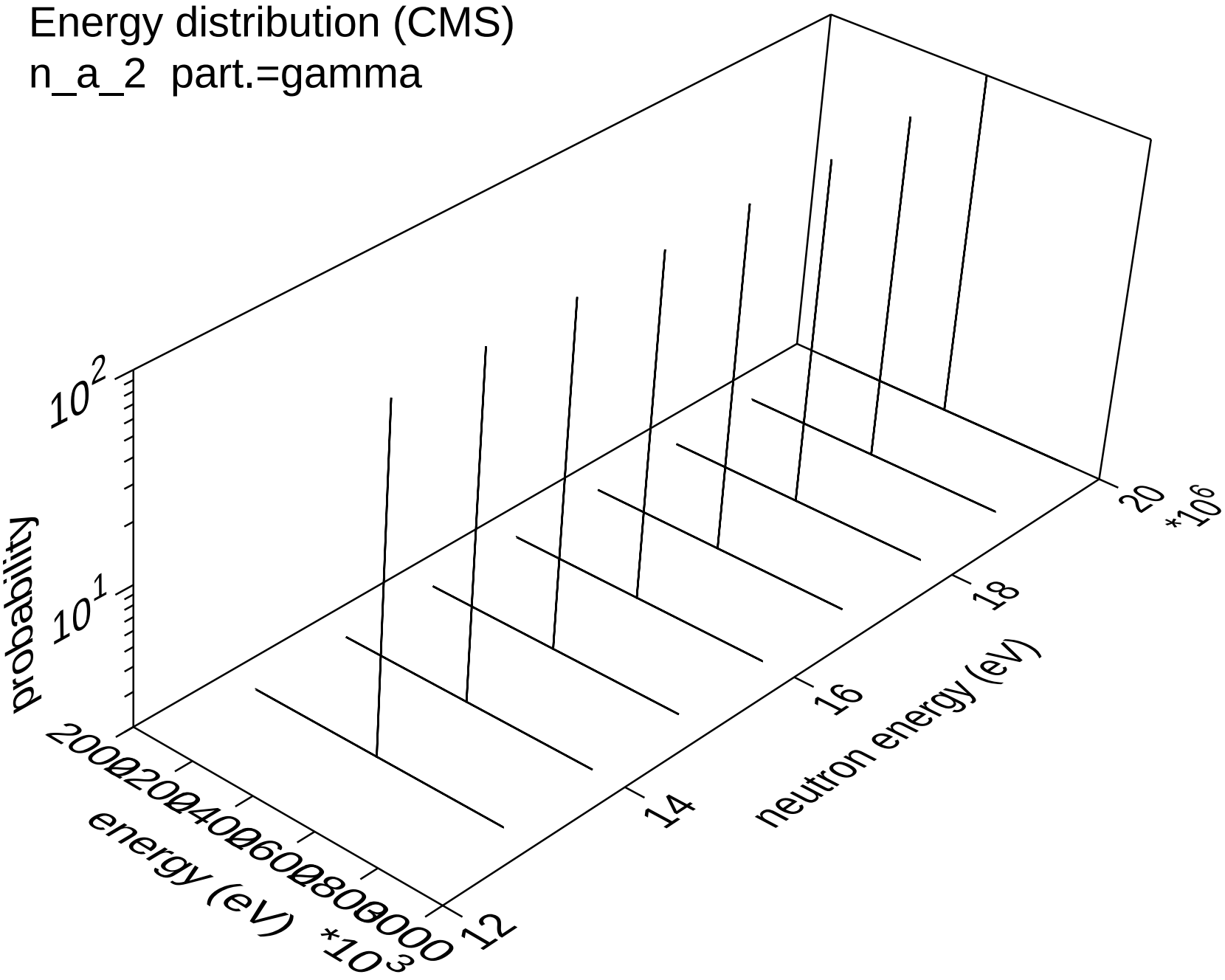

Energy distribution (CMS)
n_t_cont part.=gamma
probability
10^1
10^0
0.0
0.5
1.0
1.5
*10^6
energy (eV)
19.0
19.5
20.0
*10^6
neutron energy (eV)

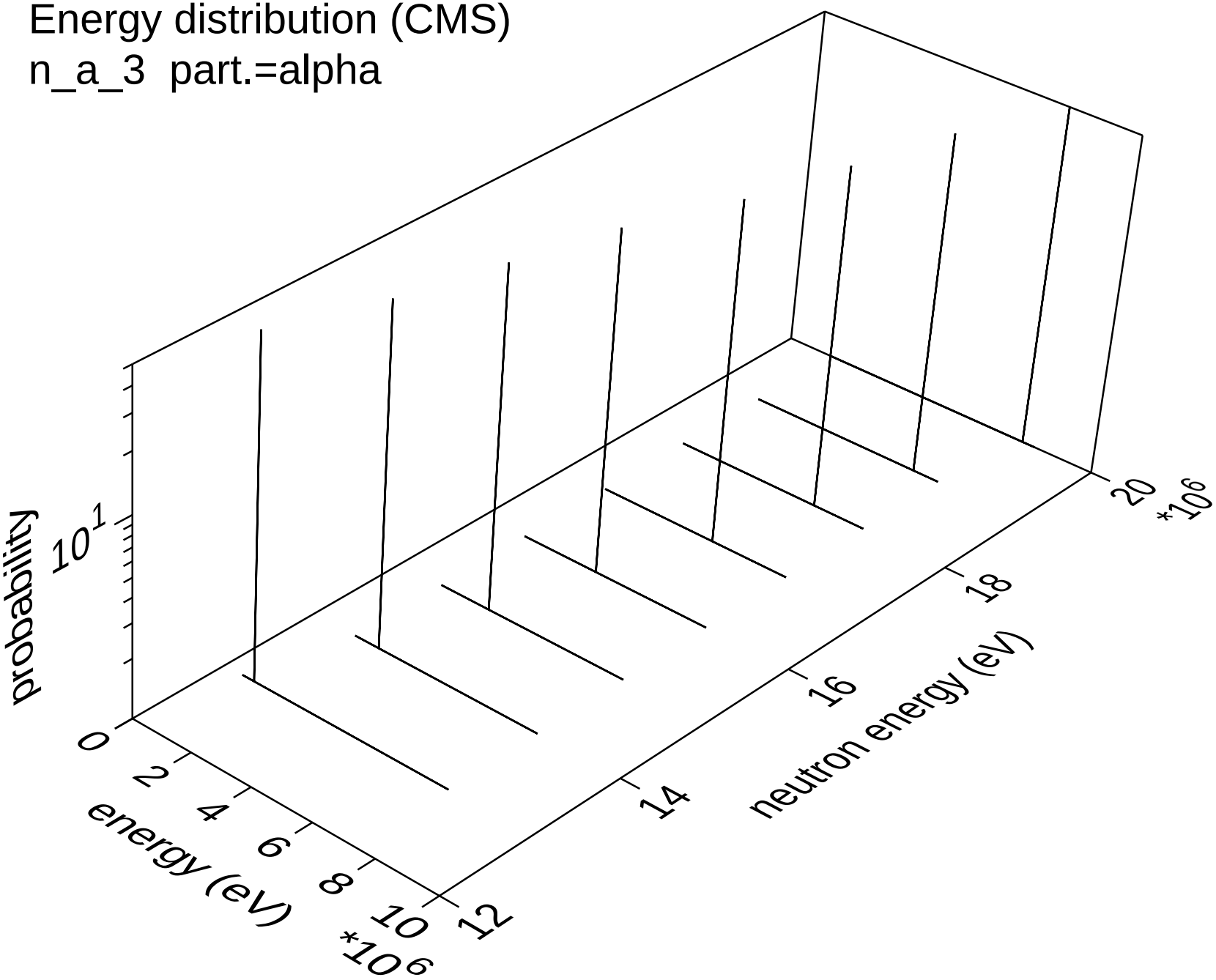

Energy distribution (CMS)
n_a_0
probability
10^{-1}
0
energy (eV)
5
10
15
*10^6
10
15
neutron energy (eV)
20
*10^6

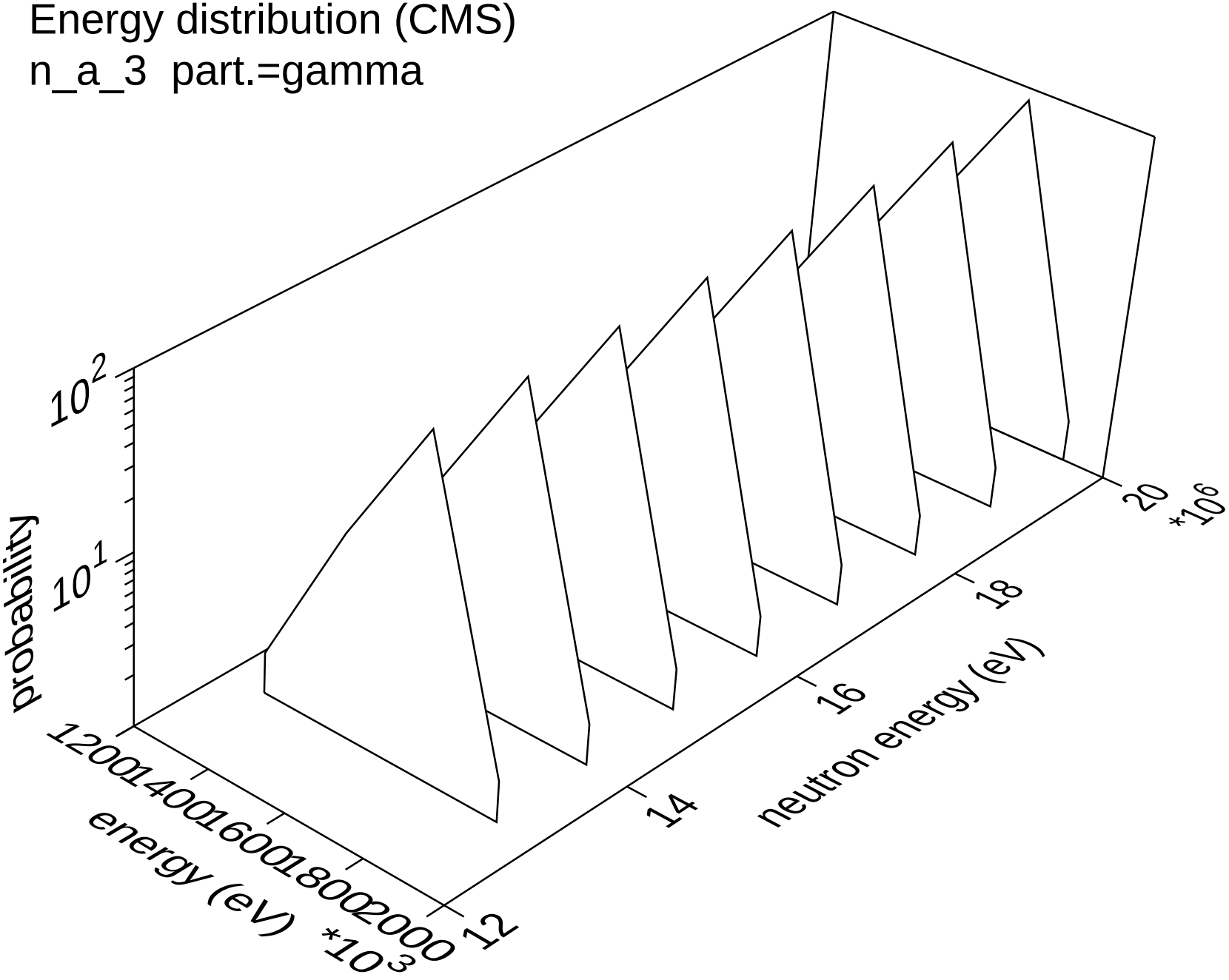

Energy distribution (CMS)
n_a_1 part.=alpha
probability
10^-1
0
energy (eV)
2
4
6
8
10
*10^6
10
12
14
16
18
20
*10^6
neutron energy (eV)

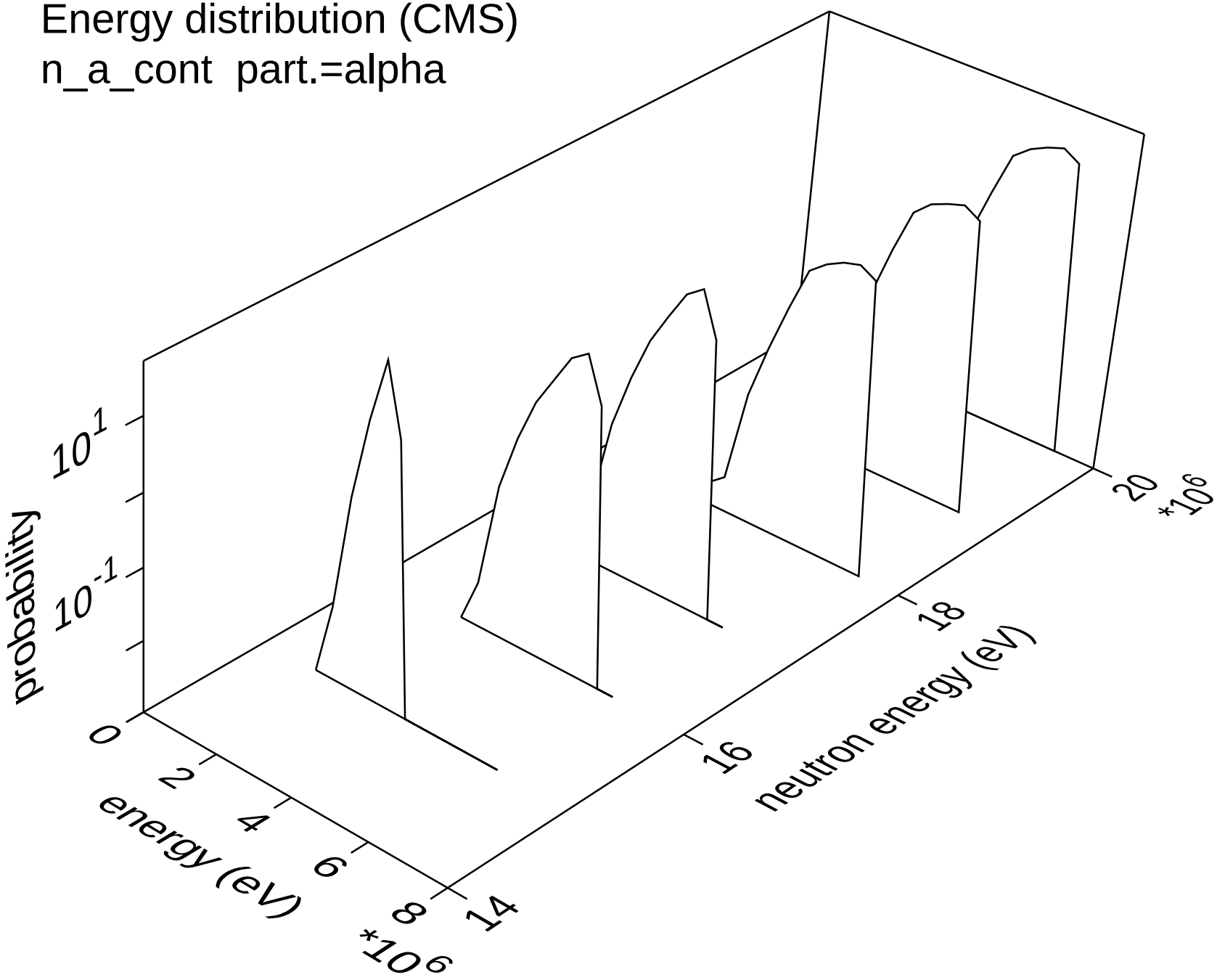

Energy distribution (CMS)
n_a_1 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
1200
1400
1600
1800
2000
2200
10
12
14
16
18
20
neutron energy (eV) *10^6

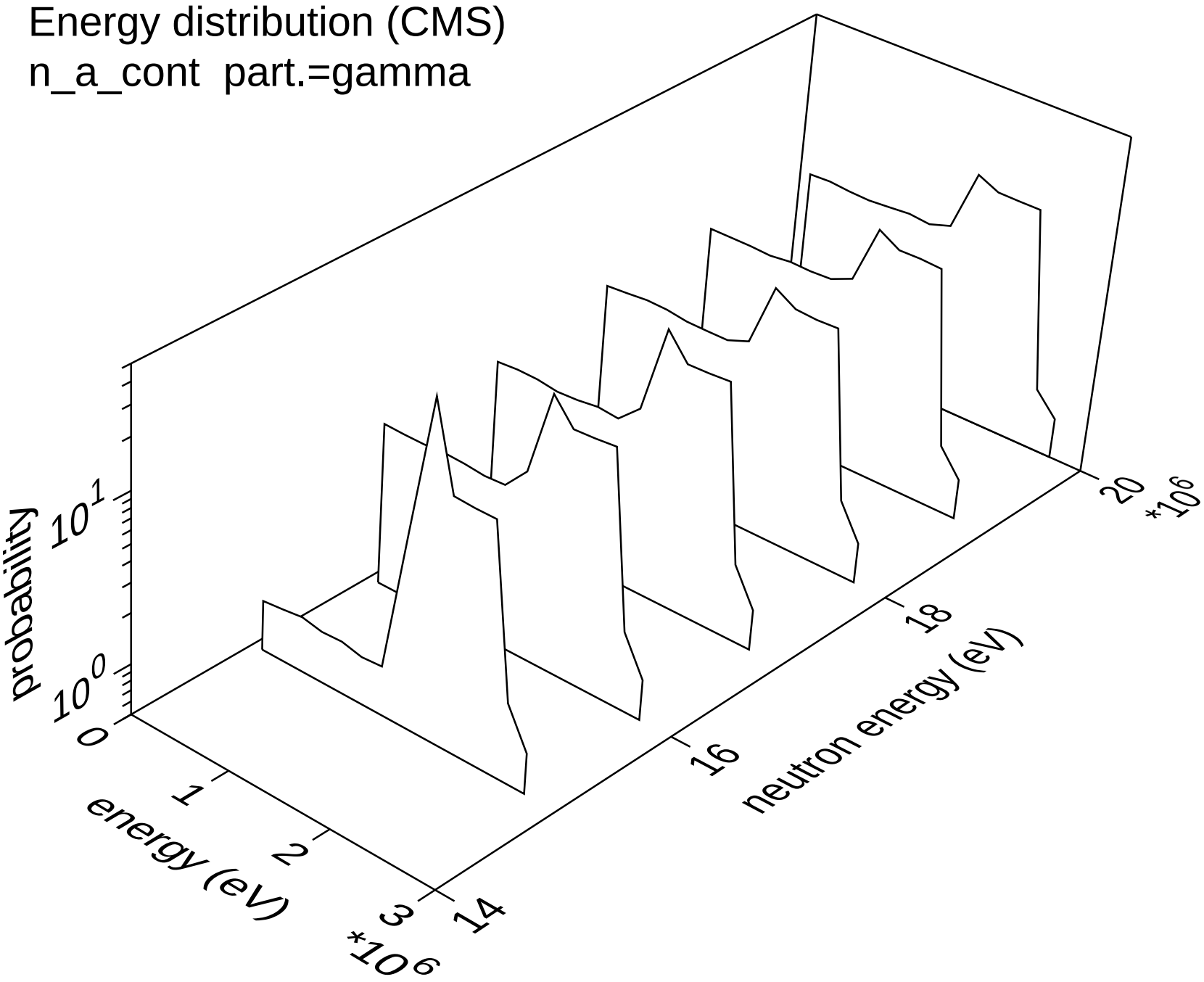

Energy distribution (CMS)
n_a_2 part.=alpha
probability
10^{-1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_a_2 part.=gamma
probability
10^2
10^1
energy (eV) *10^3
0
200
400
600
800
1000
12
14
16
18
20
neutron energy (eV)
*10^6


Energy distribution (CMS)
n_a_3 part.=alpha
probability
10^{-1}
0
2
4
6
8
10
12
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_a_3 part.=gamma
probability
10^2
10^1
1200
1400
1600
1800
2000
energy (eV) *10^3
12
14
16
18
20
neutron energy (eV) *10^6


Energy distribution (CMS)
n_a_cont part.=alpha
probability
10^{1}
10^{-1}
0
2
4
6
8
*10^6
energy (eV)
14
16
18
20
*10^6
neutron energy (eV)


Energy distribution (CMS)
n_a_cont part.=gamma
probability
10^1
10^0
0
1
2
3
*10 6
energy (eV)
14
16
18
20
*10⁶
neutron energy (eV)